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# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE AND SUCCEED  
FOUNDED 1886

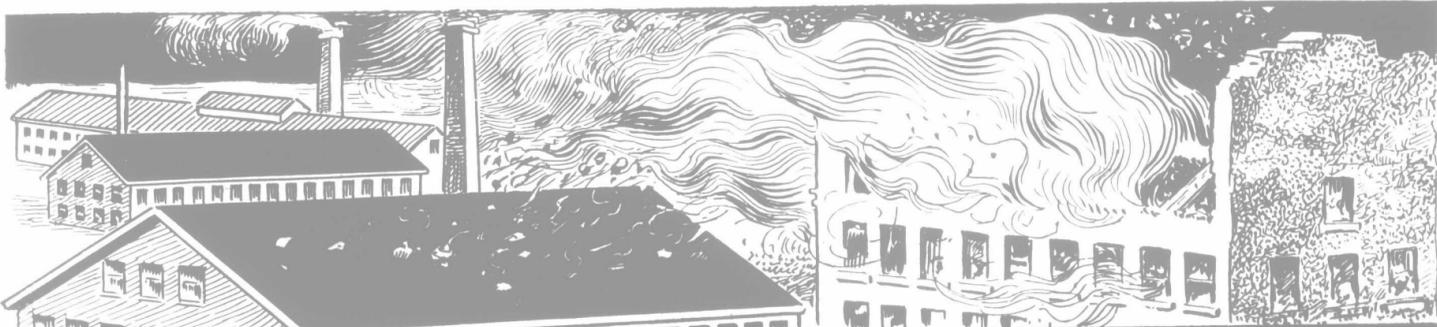
Dept. of Agriculture  
Census and Statistics  
Dec. 31, '09

\* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE.\*

Vol. XLV.

LONDON, ONTARIO, APRIL 21, 1910.

No. 917



## They're Safe From "Flying Sparks" When Protected With Brantford Roofing

TRENTON COOPERAGE MILLS, Limited

MANUFACTURERS OF

HOOPS, HEADING, STAVES



Read the letter of the Trenton Cooperage Mills. Learn how the buildings covered with Brantford Roofing were saved from fire. Certainly Brantford Roofing was given a severe test at this fire.

Here is another proof of the fire-resistant qualities of Brantford Roofing: Along with slate and iron, Brantford Roofing is accepted by the City Architect and Chief of the Fire Department for use in the most congested district in Toronto. We have a certificate to that effect. Do you know of any other ready roofing that has such a certificate? We think not.

The Toronto officials recognize a real fire-resistant roofing when they find one. So do the fire insurance companies. They will give you lower rates for buildings covered with Brantford Roofing. This is a consideration worth thinking about when buying roofing material.

You can put Brantford Roofing on your home or barn or any other building and feel sure that it has a fire-proof roof. You can erect the building right beside the railway track. "Flying sparks" are no menace to a roof protected with Brantford Roofing.

You have your choice of three different finishes of Brantford Roofing. ASPHALT has a silica sand finish. RUBBER has a smooth, rubbery surface, but contains no India Rubber. CRYSTAL has a mineral surface, like rock crystals. Brantford Asphalt and Rubber are made in the heavy weight. Brantford Crystal in heavy weight only.

You cannot also get a roofing by its price. Lower-grade roofings cost you at least the same price as Brantford Roofing. Get the quality of Brantford Roofing.

Get our big Brantford Roofing Catalogue, showing you in Brantford Roofing, high quality, and the reasons. They procure today's best materials and are made by next stand for fire-resistance. They are made in the best way. 24 mail. We will send you a copy of our Catalogue.

Brantford Roofing Co., Limited, Brantford, Canada

Trenton, Ont., Oct. 28, 1909  
Messrs. The Brantford Roofing Co.,  
BRANTFORD, ONT.

RECEIVED  
OCT 30 1909  
ANSWERED  
OCT 30 1909

Gentlemen,-

We have much pleasure in telling you frankly, that your Brantford Roofing, proved in our recent fire to be practically fire-proof.

The buildings that surrounded the burned barrel Factory, were covered with your one ply Roofing, and stood the intense heat, and shower of cinders, blowing directly on them by a very strong wind, splendidly, and saved the sheds from catching.

We might say, that no water was used on these sheds, and if your Roofing had not been fire-proof, they certainly would have burned.

We assure you, that you do not exaggerate the quality of your goods, and Brantford Roofing, has been to us, all you claimed for it.

Yours faithfully,  
TRENTON COOPERAGE MILLS LIMITED  
*W. H. Cooper*

# RENNIE'S SEEDS



Get Catalogue for 1910<sup>14</sup>  
Ask your dealer, or write  
**Wm. Rennie Co., Ltd.,**  
TORONTO, also  
Montreal, Winnipeg  
Vancouver

## Northern Ontario

The forest and mineral wealth of Northern Ontario has attracted many people from all parts of the civilized world.

One ninth of the world's reported output of silver in 1908 was taken from Ontario mines.

New discoveries of undoubted richness are being constantly reported from sections far distant from the far-famed Cobalt. Yet a more certain reward is insured to the settler who acquires for himself 160 acres of the rich agricultural lands now open for settlement and made accessible through the construction of railways and Colonization Roads.

The fertility of the soil is unsurpassed. The timber is in demand at a rising price. Mining, railway and Colonization Road construction, lumbering, etc., afford work in abundance to those who have not the means to remain on their farms continually. These also provide a market for farm produce at prices unequalled anywhere.

Cochrane, the terminus of the T. & N. O. Ry., on the G. T. P. Transcontinental Railway, now under construction, is in the same latitude as the southern part of Manitoba, and 800 miles nearer the seaboard.

That the experimental stage is past is clearly demonstrated. The country is rapidly filling up with settlers from many of the other Provinces, the United States and Europe.

For information as to terms of sale, homestead regulations and for special colonization rates to settlers and for settlers' effects write to

**D. SUTHERLAND,** The Director of Colonization,  
Parliament Buildings, TORONTO.  
**HON. J. S. DUFF,**  
Minister of Agriculture.



### Synopsis of Canadian North-west Land Regulations.

ANY person who is the sole head of a family, or any male over 18 years old, may homestead a quarter section of available Dominion land in Manitoba, Saskatchewan, or Alberta. The applicant must appear in person at the Dominion Lands Agency or Sub-Agency for the district. Entry by proxy may be made at any agency, on certain conditions, by father, mother, son, daughter, brother or sister of intending homesteader.

Duties—Six months' residence upon and cultivation of the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 80 acres, solely owned and occupied by him, or by his father, mother, son, daughter, brother or sister.

In certain districts a homesteader in good standing, may preempt a quarter section alongside his homestead. Price, \$3000 per acre. Duties—Must reside six months in each of six years from date of homestead entry (including the time required to earn homestead patent) and cultivate fifty acres extra.

A homesteader who has exhausted his homestead right, and cannot obtain a pre-emption, may take a purchased homestead in certain districts. Price, \$3000 per acre. Duties—Must reside six months in each of three years, cultivate fifty acres, and erect a house worth \$300.

W. W. COOY,  
Deputy of the Minister of the Interior.

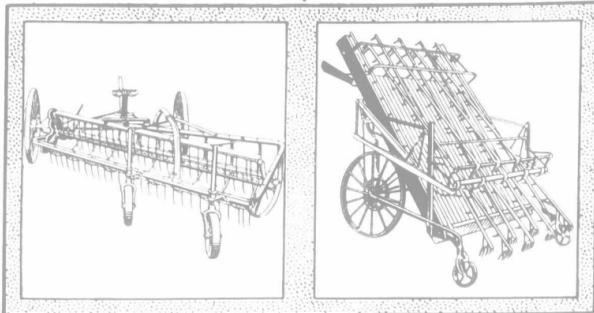
N.B.—Publication of portions of this advertisement will not be paid for.

Seed Oats and Barley—Improved Ligowa, pure, clean, pump sample; Manitoba, or other, a good lot. Satisfaction guaranteed.

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**SEED CORN**—The only seed corn in the world that has been tested for 10 years' experience. Send for more particulars to  
**M. A. Jones, Ruthven, Essex Co., Ont.**

When Writing Mention This Paper.



## Save Time, Money and Labor With These DAIN Implements

### The DAIN ALL-STEEL SIDE DELIVERY RAKE

won't whip or toss hay. Won't break off tender, nourishing leaves. The three sets of revolving teeth move slowly and handle hay gently. Shakes off water (after rain) and leaves hay with plenty of air space, so it is cured scientifically. Works around field, like the Dain Mower; leaves 2 swaths of hay upside down in loose continuous windrow, producing quality hay at its best, of the right color, retaining the rich nutritive juices. Rakes cleanly because the reel is on an angle from main frame when raking with the swath—the rake teeth stand straight and point toward ground. Draw straight out of hay, which prevents it wrapping around reel. The Dain All-Steel Side Delivery Rake goes over stumps, stones and other obstructions; operates easily; built to last, of best materials. Does more than any other rake on earth.

### The EASY-RUNNING DAIN HAY LOADER

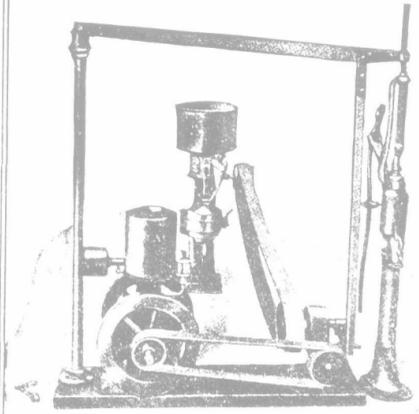
is built of best material, guaranteed to do as we claim. Construction, simplest in the world, and has the lightest draft on earth. Loads from swath or windrow; works without friction, because principal parts are hammock mounted and swing like a pendulum without binding or strain. Rakes operate at exactly the right speed to require least power when working. Gather hay from swath regardless of width of mower; divides swath at your will. Rakes are malleable with spring trip. Pass over all obstructions, spring back and fly into place. Operates close up to fences or ditches. Goes through ordinary farm gate. Elevator adjusts itself readily to light or heavy hay. Only loader made that is free from twisted chains, cog-gearing, drums, cylinder, return carrier, and long crooked crank shaft. Stays in working order, needs fewest repairs. Lasts longest.

Don't spend a dollar for any hay-making implement until you get the Dain free catalog. Get this information. It will pay you. Write now.

**DAIN MANUFACTURING CO., Limited**  
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1½ TO 40 HORSE-POWER.



Windmills,  
Grain Grinders,  
Pumps,  
Tanks,  
Water Boxes,  
Concrete Mixers,  
Etc., Etc.

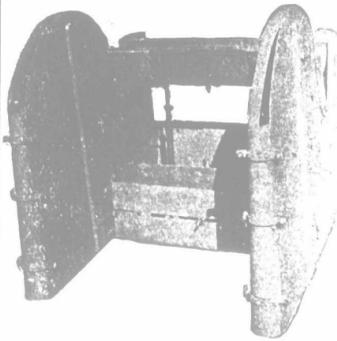
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**GOOLD, SHAPLEY & MUIR CO., LIMITED,**  
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Any size with the London A. Heston & Sons' Silos, wood silos, and all steel silos. These silos are built of concrete and are the most durable and best in the world. They are built in all sizes and are the most economical and best in the world. They are built in all sizes and are the most economical and best in the world.

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Adjustable mould for forming concrete mangers, stalls and water-troughs for cattle and horses. Pat. Oct. 24, 1909. For pamphlets, instructions to operate, and for prices, apply to

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THE INTERNATIONAL ROUTE TO WESTERN CANADA.

Through the metropolis of Chicago, thence via Duluth and Fort Frances, or through Chicago and the twin cities of Minneapolis and St. Paul.

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Solution tank is a quart Crown glass jar. If broken, it can be easily replaced for a few cents. Solution tubes are brass. None of the liquid used can be drawn back into the pump chamber, thus the chamber and valves are uninjured. This is the easiest operated and the most effective small sprayer on the market. Inquire of your hardware dealer.

Write for our complete catalogue of Sprayers and Garden Tools.  
**THE EUREKA PLANTER CO. LIMITED**  
Woodstock - Ont. 4

## Do You Intend Building a House, Barn, Greenhouse or Silo?

Send us your list of LUMBER (rough or dressed), LATH, SHINGLES, DOORS, SASH, TRIM, or anything in woodwork for building construction, and we will quote you promptly.

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TESTED SEEDS  
TRUE-VIGOROUS-RELIABLE



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Next Summer's Fruit

by spraying thoroughly in the spring with

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Lime Sulphur Solution

to clear the trees of scale and other parasites and fungi. Later, when the petals fall, spray with

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Lead Arsenate

for codling moth and other insects. VANCO Lead Arsenate will effectually destroy every kind of leaf-eating insect, including the potato bug.

VANCO chemicals are pure, strong, uniform and easily used. Write for Booklet on the use of Lime Sulphur and Lead Arsenate.

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Maple Buds

are different from and better than any other chocolate confection you ever tasted. Maple Buds are not made by any other concern, as the name and design is fully patented. Look for the name on every Bud.

The Cowan Co. Limited, Toronto.

GOES LIKE SIXTY SELLS LIKE SIXTY SELLERS FOR \$65



**GILSON**  
GASOLINE  
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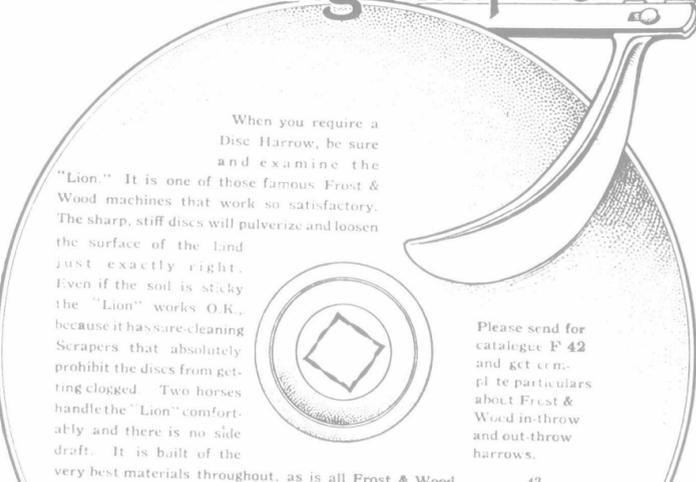
For Pumping, Cream Separators, Churns, Wash Machines, etc. Free Trial. Ask for catalog - all sizes.

GILSON MFG. CO., 150 York St., GUELPH, ONT.

**INVENTIONS** Thoroughly protected in all countries. EGERTON R. CASE, Registered U. S. Patent Attorney, TEMPLE BUILDING, TORONTO. Booklet on Patents and Drawing Sheet on request.

When Writing Mention This Paper.

**Sharp, Stiff Discs and Sure-Cleaning Scrapers**

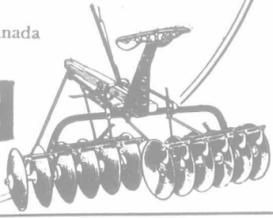


When you require a Disc Harrow, be sure and examine the "Lion." It is one of those famous Frost & Wood machines that work so satisfactory. The sharp, stiff discs will pulverize and loosen the surface of the land just exactly right. Even if the soil is sticky the "Lion" works O.K., because it has sure-cleaning Scrapers that absolutely prohibit the discs from getting clogged. Two horses handle the "Lion" comfortably and there is no side draft. It is built of the very best materials throughout, as is all Frost & Wood farm machinery.

Please send for catalogue F 42 and get complete particulars about Frost & Wood in-throw and out-throw harrows.

Frost & Wood Co., Ltd., Smith's Fall, Canada

**Frost & Wood**  
"Lion" Disc Harrow



**Amatite**  
ROOFING

**Saves Labor and Money**

A roofing that has to be painted every year or two is a constant care. Suppose you should neglect to paint yours in time. The chances are that when you did remember, (which would probably be when you discovered it leaking) it would be too late to paint or patch. You would need a new roof.

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Amatite comes in convenient rolls ready to be laid on the roof. Anyone can do the job. Liquid cement to seal the laps and large headed nails are supplied free in center of each roll.

We wish you knew as much about Amatite as we do; you'd buy it every time. It's the kind of ready roofing that makes satisfied customers.

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With cement floors reduce labor to a minimum, and make bright and sanitary stables. They are practically indestructible, while the out-of-date stables are constantly in need of repair, and are short-lived when compared with the latest and most up-to-date stables.

Our new catalogue contains a lot of valuable information for you if you are building a new barn or remodeling your old one. It is free, and a post card with your name and address plainly written will bring it. Write: **Beatty Bros., Fergus, Ont.**



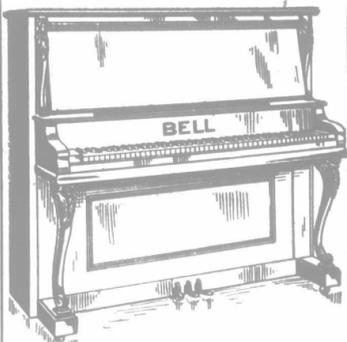
**Iron Fencing**

60 cents per foot up.

Write for free catalogue. Established in 1879.

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ART  
PIANOS  
CANADA'S BEST.



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The Bell Piano possesses several other valuable features, as described in our (free) catalogue No. 40. Send for it.

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Samples are free. Write for them. We deliver free all purchases of \$5.00 or over within 200 miles. Refund money and pay all charges if goods are not up to your expectations. Write for samples.

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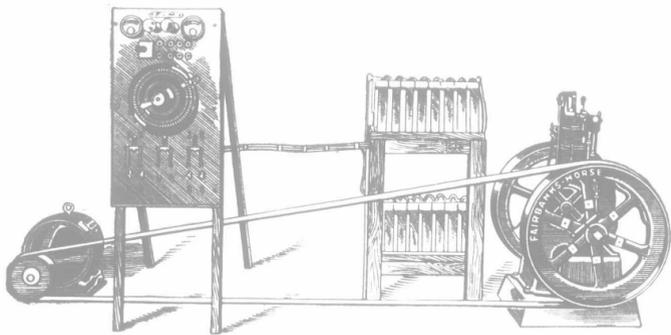
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ORDER NO. 2095.

Price **\$5.00**

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**FAIRBANKS-MORSE  
RESIDENCE ELECTRIC LIGHTING PLANT**  
50 Lights—5 cents an hour.

WE HAVE standardized the electric lighting plant shown above, and are prepared to furnish it with a complete outfit of fixtures, shades and lamps, suitable for a high-class country residence or farm, ready to put up. Everything is included except the wire, which we can furnish in quantity and size required at market price.

The dynamo will run 50 lights all the time; the storage battery will run 9 lights eight hours, 13 lights five hours, 18 lights three hours or 30 lights one hour.

The dynamo can be run during the hours when the most light is wanted, and the battery will carry such lights as are needed during the night and daytime. This allows the engine (a Fairbanks-Morse Gasoline) to be used for general farm power.

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Fairbanks Scales—Fairbanks-Morse Gas Engines.  
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113 Hope St., Hackettstown, N. J.  
164 Terminal Buildings, New York

# The Farmer's Advocate and Home Magazine

"Persevere and  
Succeed."

Established  
1868

Vol. XLV.

LONDON, ONTARIO, APRIL 21, 1910

No. 917

## EDITORIAL.

Which is it to be this year—a lot of leafy, immature stuff, or strong, well-ripened, near-ripened stalks of corn? If the latter, plant thin in rows three and a half feet apart, or, preferably, in hills. Four to six stalks to the hill is plenty.

Ready-made farms is Sir Thomas Shaughnessy's plan to attract the British tenant-farmer, who has been accustomed to carrying on operations with a foreman, and who might feel at a loss if set down single-handed on unbroken land.

A large proportion of the cheese factories in Western Ontario will pasteurize their whey this year, many additional factories having taken it up over the number pasteurizing last year. Where adopted, it has been rarely, if ever, discontinued.

While we complain of labor scarcity, thousands of men's time is being wasted to-day upon Canadian farms. They are doing work which other men might easily add to their share if they had the implements to do it with. Economy of labor is the true solution of the labor problem. This is the four-horse age.

Financial institutions in Eastern Canada are playing their part in the growth of the West. In order to meet the demands of Alberta farmers for borrowing funds, one of the strongest Ontario loan companies recently despatched one of its most experienced valuers permanently to that Province, where interest rates on farm mortgages rule at eight and nine per cent.

"The Pick of the Earth for Canada," was the inspired heading of an article published a few years ago in "The Farmer's Advocate." Since then it has become almost a slogan. "Selected Immigration" is an anonymous term. While we must not be unreasonably exacting, we shall do well to see that strong, healthy elements enter into the foundation of Canada's future citizenship.

A careful investigator has estimated that a bearing orchard removes, or should remove, from the soil each year, in the form of fruit harvested and leaves blown off, practically as much plant food as a twenty-five-bushel crop of wheat (both grain and straw), yet farmers who will summer-fallow for wheat, devoting two seasons' use of land to produce one crop of grain, often manuring well besides, will expect their orchards to bear fruit year after year, and a crop of pasture, grain or hay, besides. Usual result: A loss in quantity and quality of fruit several times greater than the net returns from the other crop.

It was not concern for the true interests of horse-breeding that strangled the Miller bill. That may have weighed with a few, but, for the most part, it was an excuse. The main, actuating influence behind the opposition was sport, coupled with the sordid motives of the beneficiaries of racing and gambling. Sporting influence is strong in Parliament, and the wonder is the bill mustered the strength it did there. This may be attributed to the revelation of sentiment throughout the country. There are arguments with some force that may be and have been conscientiously advanced against the Miller bill, but interference with horse-breeding is not one of any consequence. Deliver the horse from prostitution by his friends!

### Are Weeds Getting Worse?

Men in the seed trade state that weeds appear to be getting more prevalent, and that clover seeds are more foul with noxious weed seeds than was the case a few years ago. If this be true, it is deplorable, and suggests the imperative need for more uncompromising warfare against these wasteful plant pests. A double plan of campaign must be waged: First, on the farm, weed destruction by effective methods of rotation, tillage, and the prevention of weeds going to seed; and, second, the protection of those who buy weeds for use from having weed seeds imposed upon them when they are paying for something else. The Seed Branch of the Dominion Department of Agriculture, and the Provincial Departments, through the work of their officers in the press, on the platform, and otherwise, aim at furnishing the weapons of information to aid in the former crusade, and the Seed Control Act is to safeguard the seed supplies used in Canadian soil. Municipal councils ought to put more drastic vim into the administration of the weed laws this season.

The distribution of the volume, "Farm Weeds," in the public schools, and its circulation elsewhere, has proven of decided informational value, by putting old and young upon their guard as to what are weeds and their habits. To the same end, valuable service was rendered by sending out labelled cabinets of weed seeds. We are, therefore, disposed to believe that both farmers and seed dealers are able now to recognize more weeds and distinguish more weed seeds than they did, say, five years ago, and that conditions are really improving, as shown by the quality of the seed distributed in the trade. In response to inquiry, we find, taking individual farmer's lots as a basis, the Seed Branch records, showing that, up to 1905, when the Seed Control Act became law, only about 25 per cent. of lots in the average, including several districts where clover seeds are grown, could be graded No. 1. But last year the results show that 40 per cent. of the individual farmer's lots could easily be cleaned to grade No. 1. It is, of course, unfortunate that the seed from clean farms, and farms that are not, is too frequently bulked together by local buyers, and in that condition reaches the large cleaning plants. Many farmers' lots this season would be prohibited for sale, except for the purpose of being re-cleaned.

### Work of the Seed Branch.

That the active work of the Dominion Seed Branch in testing for purity and vitality samples sent in by dealers and farmers, is increasing, is most reassuring. In 1904-5 the Seed Branch employed ten workers, and now there are thirty-three, including the Calgary Seed Laboratory. Each test, on the average, requires one hour's time on the part of one expert, and this season the staff have been able to mail reports on purity tests from the office within thirty-six hours from the time the seed sample was received. Unless received promptly, reports would be of little use to seed merchants during the busy trade season. To show that farmers and the seed trade are increasingly making use of this branch of the public service, we find that, while, in the year ending March, 1904-5, the number of samples tested for farmers and seed merchants was 617, during the year ending March 31st, 1908, the tests ran up to 13,924, more than one-half of which, however, were germination tests of frosted grain from the three Prairie Provinces; during the year ending March, 1909, there were 6,291 samples tested. Besides these, from 500 to 700 samples are collected and tested during the early summer months

for investigation purposes. From the middle of March to the first of May, a large proportion of the samples tested are from farmers. From September 1st, 1909, to March 31st, 1910, there were 4,110 samples tested for purity or germination, or both, and about 93 per cent. of these came from seed merchants. During the same period of 1908-09, the number of samples tested was 3,410. While large seed-houses have expert testing of their own, practically all the Canadian seed merchants who sell grass or clover seeds in quantity make use of the laboratory of the Seed Branch in the Canadian Building, at Ottawa. This year the great rush of work was between March 15th and April 15th, and the entire staff worked through the usual Easter-holiday period.

### The Demand for Clean Seed.

As farmers, we can scarcely take this weed-seed question too seriously, and when one sees fertile fields, previously clean, bringing forth from one seeding a crop of ox-eye daisy, wild mustard and sow thistle, there ought to be something more than mere indignation for such an outrage. A restive feeling on the part of seed-users, and a desire for strengthening the Seed Control Act and its administration, as a check upon the unscrupulous, is one of the best signs of the times. With regard to grass and clover seeds, the Seed Branch ought, by this time, to be in a position, considering the crop now produced in so far as weed seeds are concerned, to define standards as No. 1, 2, 3, or "rejected," in case of any samples that might come to them for test. The American market having been practically closed against any low-grade Canadian seeds, a more explicit grading system, satisfactory to the trade, might well be put in operation that would assure better prices being paid to farmers in favor of seed grown on clean land. President Duke, of the Ontario Corn-growers' Association, stakes his reliance on the belief that quality is a recommend, and that the Canadian farmer is willing to pay for the best, if satisfied that he receives what he is paying for. Most men like to buy as cheaply as they can, but the discriminating farmer knows that a few cents' difference in the cost of pure and clean seed grain may easily mean ten times as many dollars in the resulting crop. Reputable seedsmen of long standing know that a satisfied and successful customer is one of their best assets. They welcome the desire on the part of their patrons for high-class seeds, because it augurs well for future business and an improvement in the conditions on farms from which future supplies for the trade may be drawn. It is probable that, in the warfare against weeds, the most strenuous fight, after all, is upon the farms; and, while the Seed Control Act is strengthened in relation to the purely commercial aspects of the business, the time is doubtless approaching when its provisions may require more rigid application in the farm sale of seeds, as well as in their purchase.

Alarmed at the removal of over ninety-five thousand American settlers of the best type, carrying with them nearly a hundred million dollars of capital, to the Canadian West last year (ending March 31st), the United States authorities have contemplated efforts to check the emigration. The effort has been deferred too long. The tide cannot now well be stemmed, and even if it were, the Canadian West has reached a point where its continued progress is guaranteed. The land is there, the climate is there, the social, economic, judicial and Governmental conditions stand favorable comparison, and that region will attract immigrants from the congested districts of the continent as surely as water seeks its level.

## THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

PUBLISHED WEEKLY BY  
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JOHN WELD, MANAGER

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### "Chores" as Education.

Dr. Balliet's dictum, reported last week, that reading, writing and spelling are the novelties—the real fads and frills of education—and that nature study, manual training, cooking and sewing are, and always have been, the essentials, needs explanation, if not defence. Are writing and book-study things of but a few hundred years? Had not Imperial Rome its pedagogi and rhetors, and were its schoolboys not required to learn the twelve tables of the law? Cato and Cicero taught their children to read and write. Ancient Egyptian youths may have learned their country's history from the papyrus, and China had its schools and bookish education before Moses was born.

Of one arguing along this line, Dr. Balliet might ask, "Are you not confusing school exercises with education? The book-learning of the Chinese was at the root of their national stagnation. Their school studies were mere recapitulation—nothing but marking time, not a forward step. Book-studies have always been the frills; the essentials have been the experiences that trained the youth to do things, to react on environment, and to adopt means to accomplish desired ends. These activities developed the physical and executive powers of the youth, and made him strong, resourceful and useful. Which," he might ask, "is more educative, to sit in the school-room and read about sheep, about wool-combing, and cloth-weaving, or to take part in feeding the sheep, washing the wool, shearing, carding, spinning and weaving it, and shaping the homespun and hoddin gray into needed garments?"

The experience of a farm boy is in most educative respects richer than that of his town cousin, who has few or no home duties, and the experiences in the homes of the pioneers being, as a rule, more varied and strenuous, may have been more educative than they are in most farm homes to-day.

In one of the most expensively-equipped elementary schools in the country, having connections with a great American university, a con-

siderable part of the education is given through the industries and arts practiced or observed by the children in the homes of the pioneers; carding wool, ginning cotton, weaving upon simple hand-loom—in short, inventing, devising, adapting means to accomplish ends that the teachers adroitly lead the children to deem important.

Dr. Balliet would seem to claim that these are the lines along which the race has journeyed to its victory over self and nature. Books can tell us of our inheritance from the ages; but there is force in the argument that, to enter rightly on its possession and enjoyment, we must have training or education of like quality to that which has provided it.

The honor roll of all our legislative bodies contains a large proportion of names of men who learned when boys to bear the responsibility of discharging home duties. As farmers' boys, which many of them were, the daily "choring" developed their strongest qualities. It was not simply that these morning and evening duties accustomed the boy to work; they sharpened his intellect by supplying him with a variety of practical problems for the solving of which he had to find a way or make one. These experiences endowed him with intellectual alertness, self-reliance, physical power and endurance—the very qualities needed for successful and useful citizenship. Looking back, he might well exclaim, "Blessed be chores!" A boy who has not learned to work and bear reasonable responsibility before he is eighteen years of age, has an incomplete and lopsided education. His chance of making a successful life is risked.

Books and book-learning are of incalculable value to those who have learned how to make proper use of them. The tendency of the exclusively bookish education is to cause its subjects—should we say, its victims?—to try to escape work. The product of such an education is the Chinese mandarin, proud of his claw-like fingernails, which prove that he never does any work. An ideal education teaches work; it lifts work above toil and drudgery; it invests work with ambitions, and beautifies and idealizes it. One wishes for the time to come when he may not need to work; another, that the time may never come when he cannot enjoy work. Which wish is better?

### About the Only Man's Job Left.

"The farming of the future is going to be the best of the learned professions, and the only one in which a man of brains and character can find scope for his individuality and character," declares Peter McArthur, in his weekly letter to The Globe, with some slight exaggeration, perhaps, but with the inspiration of prophecy, all the same. Machinery and organization have changed things about in the towns, till trades have become a thing of the past, machines do the work, and men and women get jobs to wait on them. Human beings are mere automata in the industrial organism. Factory work is machine-driven drudgery, and the man who thinks that kind of work preferable to farming, deserves no better employment. The case of the mental worker is really worse, in one sense, he thinks, than that of the manual laborer. The clamor for dividends converts vast, complex business organizations into soulless, unyielding juggernaut employers. Results are everything, individuals nothing. "In the country, things are different. Such machinery as is used only serves to relieve farm work of its drudgery. Seed-time and harvest still have their olden charm. As for organization, it will be many years before the farmers have enough of it to enable them to get the just returns from their labor. In all their work and business dealings farmers are their own masters, and need not be driven either in matters of work or conscience. And the way scientific farming is developing, the farmer's work can give as much scope to his brain power as any of the learned professions. Neither are the financial returns to be despised. A successful farmer can make as good an income as the average city man. When these things are understood as they should be, I expect to see an exodus of intelligent men from the cities to the country, where they can develop themselves physically, mentally, morally and financially. Indeed, a day may come when we will hear people preaching, 'Boys, don't leave the city.'

"Farming is about the only man's job left."

### Government Ownership of Grain Elevators.

Organized grain-growers in the Canadian West have developed such strength as to bring influence to bear not only on the Provincial Governments of the three Prairie Provinces, but also in the Dominion House. Several instances are on record wherein persistent agitation finally brought remedial legislation.

For several years, unsatisfactory conditions in the marketing of the staple crops of the prairies led a certain element among the grain-growers to clamor for Government ownership of grain elevators. For some time the agitation was not considered seriously in legislative halls. For four seasons past, however, the grain-growers' organizations in each of the three Western Provinces have called with no uncertain call for some action on the part of those in power. In 1906, the Royal Grain Commission, at numerous sittings in all parts of the prairies, invariably heard suggestions to the effect that Government ownership of the elevator systems would remove many of the evils that were so obnoxious in connection with marketing grain. The annual meetings of the Grain-growers' Associations each year have resulted in resolutions to that effect, amid enthusiastic cheers. Deputations, also, have waited upon the Government leaders.

Very little notice, seemingly, was taken of the strenuous campaign until the annual meetings of 1908 were ended. The associations had gained in numbers and in prestige, and the call was so loud that the Premiers of Manitoba, Saskatchewan and Alberta decided to confer and discuss a plan that would meet the requirements of the three Provinces. The outcome was an announcement from the Premiers that Government ownership of elevators was beyond Provincial powers, and that a special Dominion charter would have to be granted before the Provinces could act.

Disappointing as was this decision of the heads of the three Provinces, the grain-growers did not give up. So strenuous was their campaign during the summer of 1909 that the Manitoba and Saskatchewan Governments, at least, decided to take action. At the Saskatchewan session last fall, the Premier announced that they had learned that the Provinces could legislate in regard to Government ownership of elevators. Within a week, and while the Manitoba Grain-growers were holding their annual convention, at Brandon, the Manitoba Government also decided to accede to the loud request of the organization. The Alberta Government, while appreciating the sincerity of the growers, concluded that, since the Sunny Province was destined to develop into mixed farming, it was not wise to spend a vast sum of money on Government-owned grain elevators. They decided to support other branches, such as live stock and dairying, and at the same time do what they could to protect the interests of the grain-producers.

The Saskatchewan Government decided to move cautiously. A bill, introduced at the last session, provided for the appointment of a commission to look into the question, and report. A few weeks ago, the personnel of the commission was announced, as follows: Prof. Robert McGill, of Dalhousie University, Halifax, N. S.; Geo. Langley, M. L. A., Maymont, Sask., and F. W. Green, Secretary Saskatchewan Grain-growers' Association, Moose Jaw, Sask.

Manitoba Cabinet Ministers, in December, through the Minister of Education, told the Grain-growers, in convention assembled, that they had decided to accept the principle of Government ownership of elevators as suggested by that august body, and to establish a line of elevators. The Association was asked to appoint a committee to meet the Government and arrange details. This committee and the Provincial Cabinet discussed the question pro and con, but the Government could not see the wisdom of accepting all the proposals of the Grain-growers' executive. The result was the drafting of a bill by the Government, and also one by the Grain-growers' executive. Objectionable clauses in the Government bill from the Grain-growers' standpoint, included Government appointment and control of the commission placed in charge of the elevator system; an expropriation clause whereby the Government

could expropriate existing elevators, and another clause providing that a Government elevator will not be constructed at any point until a petition asking for the same, signed by sixty per cent. of the grain-growers contributory to such point, is presented.

The Government bill was passed at the recent session of the Legislature. On the Government's request, the Grain-growers' committee submitted four names of men that they would consider capable commissioners. The Government has not yet decided on a commission. It is hoped, however, to have definite action taken before the crop of 1910 begins moving to market.

### Results from Apple Orchards.

Public skepticism of calculated results is well founded. "Figures never lie, but liars can figure," is a saw with considerable significance. Not how much a man estimates he can do, but how much he does do, in the face of the various disabilities he has to grapple with, is what people want to know. Hence the great value of figures from actual demonstration work, such as carried on in our orchard last season. The Pacific Coast is a prolific breeding-ground for big stories, indisputable facts being often construed to prove what they do not prove at all. D. Johnson, of Forest, who travelled through the West last year, illustrates the point this way. "Three years ago, one apple tree in our orchard bore 26 barrels of apples, which made us over \$80, prices that season being good. If that had occurred in British Columbia, they would have figured out the returns from an acre of such trees, planted fifty trees to the acre, as \$1,000, and published it as an example of what could be done in orcharding in their Province or district. Ontario can furnish material for big stories of that kind, too." What is better, this same Province can furnish splendid examples of success in every-day commercial operations, and none, perhaps, more creditable than that of Mr. Johnson himself. Here is a brief account of the business carried on by Mr. Johnson and his brother, J. A. Johnson. It is published without their consent, for they are nothing if not modest.

Johnson Bros. have thirty-five acres of bearing apple orchard, and twelve acres not yet bearing; fifteen acres of plum orchard, ten acres of which is planted as fillers in apple orchard; and twelve acres of peaches, four years old this spring. The gross returns from these orchards last year were \$7,900. Plums were a poor crop with them in 1909, and prices bad. The peach orchard will have its first crop of importance this year. In addition to their own orchards, they have about ten acres rented. Two evaporators use 500 bushels of apples each per day, one of these being in the orchard, the other at Wyoming. They make their own barrels, and use everything in the apple orchard, even to the peelings and seeds. Last year they had 120 hands employed in orchards, farms, evaporators and cooper shops. "We are still only playing on the edge of our possibilities," says Mr. Johnson. "We intend to stay in the business, and endeavor to extend much larger than we have yet done. All this has developed from the system of co-operation we adopted at Forest, which has enabled us to realize better returns for the fruit, and given an impetus to the business."

One other instance may be here cited. In Norfolk Co., Ont., six or eight years ago apple-growers were discouraged, and orchards were valued at less than vacant land alongside. Co-operation was adopted, bringing in its wake improvement in cultural practice. To-day, apple orchards around Simcoe are selling for \$500 to \$1,000 an acre, and it was estimated, a short time ago, that 30,000 apple trees would be set out this spring, besides large quantities of other stock. Speaking before the Fruit-growers of Nova Scotia, Robt. Thompson, of St. Catharines, Ont., said the land in his district, since people had begun to plant more fruit trees, had doubled in value, and was now worth \$1,000 per acre. "You people here," (in Nova Scotia), he added, "are in the same way; land here is worth just as much as with us, or as it is in British Columbia. Don't any of you gentlemen who are growing apples in this Annapolis Valley let anyone tempt you to move out of Nova Scotia, even to British Columbia. You will be disappointed if you do."

### Farming Outlook Best.

"The Farmer's Advocate" of last week contained reviews of the remarkable progress of agriculture in New Brunswick and Nova Scotia, in common with other Eastern Provinces of Canada. That the basic industry of the country should be thus advancing in peaceful prosperity is encouraging, and likewise significant, when we reflect that at the same time, labor and capital in the industrial centers, such as the coal-mining districts, were at each other's throats, like wolves. This condition, coupled with the greatly-increased cost of living in towns, should give pause to young men who are tempted to leave the farm for other pursuits that, on the surface, seem more alluring. The fear has been expressed that the naval programme being inaugurated in Canada may prove disquieting to some young men on Maritime farms, by turning their attention to that service or to the industrialism of the dock-yards. But now that farming has fairly entered upon so auspicious an era, young men of sagacity will think twice before dropping that which is sure and peaceful for more hazardous pursuits, too often associated with tendencies decidedly mischievous. Those who are disposed to sympathize with the naval propaganda may lend their aid through growing high-priced products for the participants to use. In the meantime, young men of capacity are well advised in sticking to the land. The 20th century is the century of the farm.

### A New Era in American Politics.

A considerable body of intelligent United States citizens, notably among the Republican persuasion, have been insuring with a grand surge. That tariff-revision farce lent the movement great impetus, adding to its ranks many who had formerly been disposed to stick to the party and its organization through thick and thin. The overthrow of Cannonism was a natural sequence of this unshackling revolt. The insurgent movement is typified, if not led, by Senator Albert J. Beveridge, a noted journalist, of Indiana, who not only opposed the Payne-Aldrich tariff in debate as an evasion of Republican promises, but, Daniel of Daniels, voted against it! thereby violating the party organizer's most sacred canon, namely, that it is for the leaders to think, and the rest to vote, in harmony with their dictum. In a recent magazine article, Senator Beveridge lays down the principle that, instead of the party being paramount to the citizen, and the organization paramount to the party; instead of rival factions merely scheming for power that they may fatten on public (and private) spoil—instead of all this, the growing body of independent party voters, and the further considerable body of out-and-out independent electors, will render it increasingly necessary for political parties to succeed by serving their country well, the party being the servants, not the masters, of the state.

## HORSES.

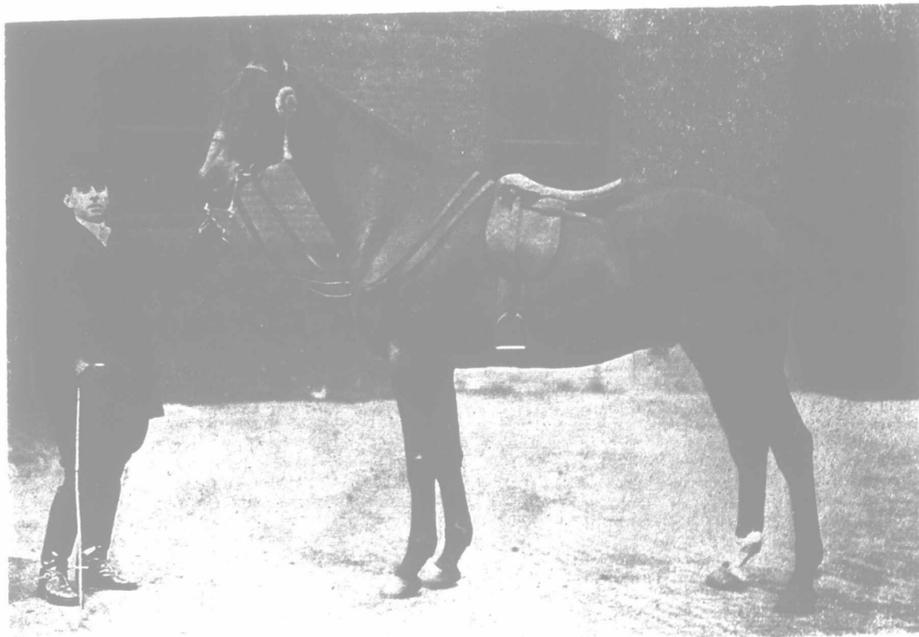
### The Hunter Breed of Horses.

There is little need to search the history of Hunters. They are a class of horse, rather than a breed, and have been evolved from the best available riding horses from the early days of British history. The Danes may have added to the stock of small, strong horses, and possibly the Norfolk cobs originated thus. It was not until after the Norman conquest that horses approaching the Hunter type were brought to England, and crossed with the pony indigenous to Britain. Nor was it until after the Crusades that our ancestors learned to appreciate the quality of riding horses. Having then seen the Eastern horses, which for centuries had been the glory of all the old dynasties of the then foremost nations of the world, and, profiting by this knowledge, they brought back with them the germs of Hunter blood.

It has been well said that the crossing of blood is important in improving the race of animals. In horses, in particular, the delineations of parents for generations back are plainly apparent through a long line of descent to the practiced eye of a close observer. Residents of Eastern Canada to-day, whose memory carries them back sixty to seventy years, can recall the type and characteristics of descendants of the grand old gray Thoroughbred stallion, Imported Messenger, in generations living many decades after that remarkably prepotent sire had been buried, with suitable obsequies and honors. And although in the breeding of Hunters at the present day it may not be deemed necessary to take the studbook as an entire guide, yet one must look into the breeding, attributes and points of both sire and dam in order to secure a true type of horse for hunting purposes, if that type is designed to be of the highest standard of Hunter.

In 1835, the Hunter's Improvement Society of Great Britain was formed, which has worked assiduously ever since in the cause of Hunter breeding, and now consists of nearly 2,000 members. It holds an important show every spring in London, when it offers nearly £1,200 in prizes, and, besides, gives medals, both gold and silver, at all leading shows in the country where Hunter prizes are offered. It has also established a Hunter Studbook, very carefully compiled, in which a large number of stallions and mares are entered. Thoroughbred sires have been almost exclusively used, and have been most successful during the last half century in building up the breed. First-class jumping blood did not spring from horses of any great size, but rather from those of medium size, thus a sound breed is more likely to be built up than from a larger type.

The breeding of Hunters in Ireland is one of the most important industries of the country, and one in which Irish farmers, as a rule, take particular interest, one of the principal reasons for which is that by far the greater number of holdings in the hands of tenant-farmers are small in size, and in the chief horse-breeding districts a great deal of the land is in grass, and comparatively little under arable cultivation; and even where there is arable land, the soil is light and friable, easily worked, and does not require heavy



Hunter Gelding, "Broadwood."

Seven years old. Champion, London Hunter Show, 1910. Sire Red Eagle.

horses for its working, the brood mares doing most of the work.

The conformation of the Irish Hunter, as it is known to-day, may be described as: Height, from 15.2 to 16.1 hands, with long, lean, well-shaped head; good neck, the underneath formation of which in the best type of Hunter is short from the throat to the chest; long, sloping shoulders, with good withers running well into the back; long, slightly-drooping quarters; strong second thighs and hocks, with the hind legs slightly inclined under the body; good arms, and cannon bone rather long. Irish Hunters, as a rule, are noted for their evenness of temper. Much of their stamina and intelligence in the hunting field is attributed to their being bred and raised on land on which, in the majority of cases, the fences are far from perfect, and some of the youngsters become self-educated jumpers by negotiating the fences before they are taken up to be trained.

### Mare Losing Colt.

Editor "The Farmer's Advocate":

From the experience of others much is to be learned, let it be good or bad, and I might say in the outset that I have received many material benefits in this way through "The Farmer's Advocate." If I might remark, too, there does appear once in a while in its columns a question which sounds somewhat silly, to my mind, and would never be printed, and much less answered, if it were not for policy's sake; and should this item appeal to you, Mr. Editor, in such a light, just pass it over to the waste basket, and oblige.

Under the heading of "Mares losing their milk before foaling," and, "If there is any remedy for or preventive," and, "The results" in cases of this kind, I have noticed in "The Farmer's Advocate" quite a number of write-ups, and it is along this line that I would ask a little space.

Three years ago I bred my mare to a pure-bred imported Percheron stallion, and was particularly careful, while she was carrying her foal, to see that she was properly handled in the way of exercise, feeding, etc. The mare worked every day up to the time of foaling, but was never overtaxed, and was fed her allowance of grain regularly. Some six or seven weeks previous to foaling wax formed on her teats, followed in a day or two by a flow of milk every little while. This continued until foaling. The colt came along all right; was a little weak, but was soon able to help itself. Its bowels and kidneys were acting all right till the third day, when it seemed to lose ambition, get sick, and only lasted about 12 hours. The trouble, to my mind, seemed to center in the stomach and bowels.

As this was the first colt the mare had, I ventured another trial, breeding her to the same horse, and the results in every particular were the same, only that the colt this time lived a day longer.

I do not profess to be a horse doctor, but it is my opinion that there is no preventive in a case of this kind, and have come to the conclusion that the cause of death in the above instances was due to the milk being too old, and things would have been different had the colt got the first milk, or what nature intended. R. J. GREEN.  
Leeds Co., Ont.,

### Prayer of the Horse.

(Translated from the Swedish.)

To Thee, my Master, I offer my prayer: Feed me, and take care of me. Be kind to me. Do not jerk the reins; do not whip me when going up hill.

Never strike, beat or kick me when I fail to understand what you want of me, but give me a chance to understand you. Watch me, and if I refuse to do your bidding, see if there is not something wrong with my harness.

Do not give me too heavy loads; never hitch me where water will drip on me. Keep me well shod. Examine my teeth when I fail to eat; I may have an ulcerated tooth. That, you know, is very painful. I am unable to tell you in words when I am sick; so watch me, and I will try to tell you by signs.

Pet me sometimes; I enjoy it, and I will learn to love you.

Protect me in summer from the hot sun. Keep a blanket on me in winter weather, and never put a frosty bit in my mouth, but hold it in your hands a moment first.

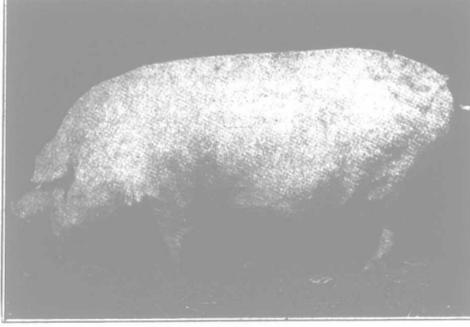
I carry you, pull you, wait patiently for you long hours, day or night. I cannot tell you when I am thirsty; give me clean, cool water often in hot weather.

Finally, when my strength is gone, instead of turning me over to a human brute, to be tortured and starved, take my life in the easiest and quickest way.

### Distinctive Character of a Good Horse.

"The horse in the ascendancy," is the heading of an editorial in the Horse World, commenting on what it construes as a remarkable trend towards the horse as a source of recreation and pleasure, noticeable in New York, Chicago, and Kansas City. In explanation of the greater appreciation manifested for a certain first-class horse outfit, in comparison with the most elegant automobiles, the editor quotes the opinion of a man who owns both motor-cars and horses: "You can buy an automobile almost anywhere you wish, and can duplicate the purchase most any time if you choose to do so; but it's different with a horse. He is like man himself. A high-class, good horse is hard to find, and always attracts the attention of the people and buyers. A good man and horse are alike, as one commands a good salary, and the other always commands a good price when sold. They are both always scarce, and always exceedingly hard to find."

This is very true. The horse is an individual with a character of his own. No two are exactly alike. Individuality contributes a large part of the fascinating interest in human nature; so, also, in equine nature, the infinite variation in form, temperament, in short, the individuality of the horse, renders him an object of study, interest and affection, such as no machine can ever be. The difference between the music produced by a skillfully-played piano and that of a pianola, is a slight suggestion of the difference between a horse and a machine. Besides individuality, the horse possesses vitality, life. He feels, knows, responds, is an object of affectionate regard. A car is an automaton, unresponsive, unfeeling, valuable chiefly for the service it renders. The horse is a creature, one of the miracles of creation, endowed with impulse, character, life. Who would not own, and, owning, love a horse?



A Chester White Yearling Sow.

The demand for horses has been beyond the expectations of the most sanguine horseman. Many drafters have been sold to go West. To price a good drafter was to make a sale. We regret, though, that so many splendid fillies and young mares have been taken. To keep these for breeding purposes would have been a better asset to our district than the money left.—[W. F. Stephen, Huntingdon Co., Que.]

In selecting a brood mare, the character, symmetry, style, constitution, soundness and type are possibly of greater importance than pedigree. But, at the same time, it is well to know as much as can be learned of her ancestors. Knowing the kind of stock she has sprung from, one may forecast with some degree of confidence the kind of stock she will produce. Pedigree stands for a good deal, and the more known about each animal's line of ancestry, the better, but seek individual merit first.

Work the in-foal mares, but work them judiciously. It is poor economy to misuse a mare heavy in foal, to make twenty-five dollars' worth of work out of her in the seeding season, and risk losing a foal that will be worth seventy-five or a hundred dollars by fall. If there is work to do, and the mares have to do it, a little care in handling, and a little reason in the amount of work expected, helps. Don't expect an in-foal mare to do as much work as a gelding or a mare not in foal. You may take the work out of them all right, but you are taking some chances on the foal.

I think that answers to questions are splendid. I also enjoy reading those articles and letters written by Mr. Rice.

A. B. VAN BLARICOM,  
Northumberland Co., Ont.

## LIVE STOCK.

### Chester White Swine.

By R. H. Harding.

The Chester White breed of hogs, known to Canadians as an American breed, is, like most of the other breeds of swine, made up from crossing, but the exact out-crosses are somewhat difficult to determine. That their place of origin was Chester County, Pennsylvania, no writer attempts to contradict. While all the Chester Whites are looked upon as one and the same breed in this country, the Chester Whites and the Ohio Improved Chester (known to us as the O. I. C.'s) are referred to as two distinct breeds in the United States, the champions of each breed claiming certain preferences for their favorites. But, according to the best authority obtainable, they both trace to the Chester County Whites. About 1820, Capt. James Jeffries imported into Pennsylvania two pigs known as the Bedfords (large, spotted hogs), which importation was followed later by others, which were crossed upon the native sows of Chester County, and are, no doubt, responsible in some degree for this breed. Nevertheless, a Mr. Barnitz, writing in the American Farmer, in 1833, says they are made up of crosses of the Suffolk (a large white breed), the English White, and the common hog. The Chesters were originally a large, coarse hog, the Ohio Improved being much longer and leaner, and harder feeders, than the Chesters, growing until they were three years old; but they have been considerably modified during the last quarter of a century, until now they rank medium as to size among the breeds.

As the name indicates, they are white in color, occasionally, blue spots are found on the skin, which are objectionable, but do not disqualify. Black spots in the hair are disqualifications. The breed is noted for being hardy and vigorous. The most modern specimen should be long and deep, straight, or a trifle arched on the back, with full hams, well let down on the hocks, with shoulder and jowl as light as is consistent with a strong, vigorous constitution, and standing up well on short, straight legs. Ears fine, and drooping somewhat, but not lopping; face slightly dished, but not too long; broad between the eyes; heavier bone preferred in the males than in the females.

As a utility breed, I consider the best specimens (and that is the only kind in any breed that should be kept as breeders) compare most favorably with any other breed, for both the feeder and the consumer. Their chief claim to preference is for crossing with the more discontented breeds. Being naturally very quiet, they produce pigs very suitable for grazing (a system of feeding which must be more generally adopted, if the best returns in hog-raising are to be attained). The reasons why I consider Chesters second to none as a farmer's hog, are: First, they are very quiet, not given to roaming; second, the sows are excellent mothers and good milkers, and almost always produce large litters that can be finished early if desired. If I were asked to advise anyone as to what I think is the best course to pursue in breeding pigs for the ordinary market, I would say: Select a good lengthy, deep Chester sow, with not less than twelve teats, and cross her with a good Yorkshire or Tamworth boar, and he will, or should, get a type of pigs that will be reasonably easy feeders, and at the same time be suitable to command the highest price in any market. To anyone breeding for a special market, such as for local consumption, at 90 to 120 pounds, dressed weight, a top cross of the Berkshire, or with the same breed (Chester), will produce a better finished carcass for the weight. At the same time, I would say that pure-bred Chesters of good type will produce A-1 packers' stuff if intelligently handled, and do it at reasonable cost to the producer. Chesters would be more plentiful in Canada to-day, I believe, if farmers had consulted their own interests, but the cry, a few years ago, for a purely bacon hog was made so loudly and persistently that several Fair boards were influenced to strike them off the prize lists, the consequence being that farmers discarded them (generally), which probably accounts to some extent for the famine prices that are being paid to-day for both pork and lard.

North of Ireland farmers are agitating for dairy qualities in the bulls in common use. The Shorthorn is the breed that is in most favor there, but complaints are heard that not enough attention is being paid to their milking qualities. At a meeting of farmers in Belfast, held during the Shorthorn Show and Sale there, a resolution to the effect that pedigreed bulls of this breed, to be eligible for premiums, must be from dams that are registered or qualified for registration as dairy cows, was seriously and ably discussed, though action was deferred.

### Two Ways of Wintering Live Stock

Stockmen visiting the Central Experimental Farm, at Ottawa, this season, could not fail to be impressed with the healthful bloom of the herds of cows and hogs, and more especially of the breeding sows. The Agriculturist, J. H. Grisdale, and his men are to be congratulated upon the visible results of the methods of management pursued. The first point that struck the editorial representative of "The Farmer's Advocate" was this, that apparently equally good results were obtained from two radically different systems of winter management, though in one case it was with dairy cows, and in the other with brood sows. It was a case of extremes meeting. One might almost imagine the herdsmen adapting the poet's couplet:

For forms of management let fools contest,  
That which is best administered is best.

Within limits, that might be so, but the public teacher or demonstrator is bound to take into account what may result in practice on the average farm, and base his counsels accordingly. Were the conditions in these stables duplicated, all might be well, but are we justified in expecting that? It is conceded that cattle so confined will show some stiffness when first turned out in spring. It remains to be seen whether there will be any permanent prejudicial effect. For young and breeding cattle stock, daily outdoor exercise is assumed to be the proper programme to promote good health, and yet, in these experimental stables are herds representing four breeds of cattle, widely differing in their characteristics, all thriving under continuous confinement for four to five winter months. They were tied with swinging stanchions, which allow a fair amount of liberty in movement of legs and body, and aid in keeping the flanks clean. With the Rutherford system of ventilation, the air of the stable is kept fresh and pure; the cattle stand on solid cement floors, but they are generously bedded with straw, so they did not complain of cold feet, and blind quarters or gargetted udders were not in evidence. Without getting into the yards to rub against the fences, or under a scratching-pole, or indulge in scraps with each other, the strong punishing the weak, their hides and hair are clean and sleek, as though the currycomb and brush have been operating. Closely confined, watered with individual metal basins, and fed from cement manger bottoms, with no wooden fixtures, the cows are the picture of health, and neither clinical examination nor semi-yearly tuberculin tests can discover tuberculous conditions; large-framed, robust and thick-fleshed are the Shorthorns, and yet they are of the fill-pail strain, and, generally, the heifers, as they come on as milkers, are doing just as well as their dams. There were a bunch of nine dual-purpose Shorthorn matrons whose tabulated records showed an average of over 8,000 pounds of milk each per year, the whole herd of that breed producing milk at a cost of 63 cents per 100 pounds, and butter at 15 cents per pound.

A corresponding bunch of nine Ayrshires gave over 8,500 pounds of milk per year, that of the whole herd costing 49 cents per 100 pounds, and the butter 12 cents per pound. French-Canadians, over 7,000 pounds each from the typical bunch; milk cost, per 100 pounds, 50 cents, and butter 9 cents per pound. Guernseys, 6,500 pounds milk, and an average herd cost per 100 pounds of 55 cents, and 9½ cents per pound of butter. For the benefit of "The Farmer's Advocate" readers, Prof. F. T. Shutt has photographed a few of the milking Shorthorns, turned out for the purpose, just to show what they look like.

So far, about a dozen Shorthorn cows, supposedly of milking strain, have reached maturity here. Two of these proved failures from a dairy standpoint, giving less than 3,000 pounds of milk in the year. Of the other ten, the lowest has a record of 4,016 pounds, the highest a record of 11,740 pounds milk in a single lactation period. The average test of the herd has been about 4.30 per cent. fat.



Wintering Sows, Experimental Farm, Ottawa.

The cow Janet (imp.) was bred by Richard Stratton, England; dropped October 4th, 1900; sire, Union Jack 75801, C. H. B.; dam, Jubilee, a cow with a record of 11,000 pounds of milk in ten months. This cow has not lived up to her dam's record, since her best year's record shows only 7,525 pounds milk, testing 4.36 per cent. fat. This shows a total of 328.09 pounds fat, equivalent to 385.99 pounds butter, 85 per cent. fat. This record was made in 1909.

Molly III. was bred by the Experimental Farm. She was born February 16th, 1907; sire, Lord Dinsdale 40392; dam, Molly II. 55269. She dropped her first calf February 15th, 1909, at one day less than two years old. This happened inadvertently. She promises to make a fair-sized cow, in spite of having calved at such an early age. Her record for the year was naturally not very high, viz., 3,051 pounds of milk testing 4.1 per cent. fat, showing 126.94 pounds butter-fat, equal to 149.3 pounds butter. She was only 250 days in milk. She calved again a short time ago, and is doing much better.

The Experimental Farm carries a considerable stock of hogs, some 449 during the past year, for breeding and feeding purposes, and experimental methods, of course, involve more costly care and oversight than ordinary commercial feeding, and yet the year's operations gave a net cash profit

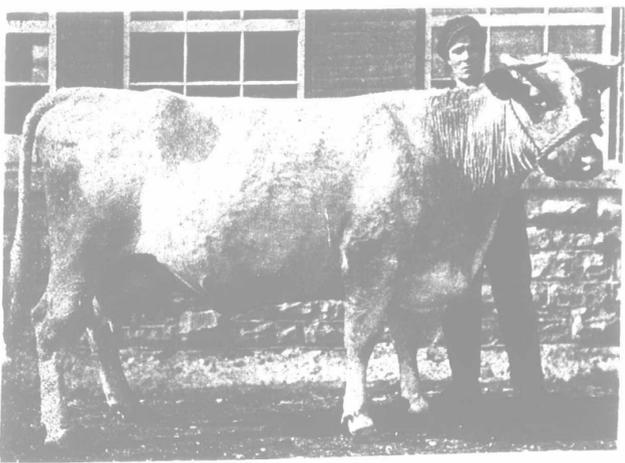
of over \$700, wages included. Prof. Shutt's camera again describes, better than any column of reading matter, the care and condition of the brood sows. Literally, they were in the pink of condition, with the temperature at zero, and the snow deep as it is at the Canadian capital. The hencoop-like structures where they slept were just rough pine boards, neither matched nor battened, so that the N. O. C. might blow freely through, but they were generously bedded with dry straw. They were as ready for their outdoor lunch of boiled roots and shorts, with clover hay fed out of racks, as the summer picnickers at Rockliffe Park are for ice-cream and ham sandwiches.

### White Scours and Navel Ill.

Questions continue to come to this office regarding the cause and cure of white scours in young calves, and navel-ill or joint-ill in foals. We have repeatedly explained that scientists have

satisfied themselves that both these diseases are infectious, and are caused by germs which gain entrance to the system through the torn and raw surface of the navel string, and that prevention is about the only ground of hope. The name white scours is somewhat misleading, for the discharge from the bowels is not always white, or even dirty white, but the principal symptom is severe diarrhea, with a lightish-colored and foul discharge. White scours affects calves from a few hours to a few days old, but some cases live for days, or even weeks, after the first illness, and eventually die of pneumonia. The disease is often coincident with contagious abortion in a herd, and in some

cases calves carried to full time, or nearly so, are practically born abortions, though alive, collapsing in a day or two after birth. For an affected one, there is little, if any, hope of recovery, though American experiment stations have reported favorably upon internal administration of formaldehyde, which is a wonderful disinfectant and antiseptic. One breeder reports a case where he was satisfied the formaldehyde treatment saved the life of a calf in a bad case of white scours. He procured half an ounce of formaldehyde solution, and diluted it with 15½ ozs. of water, took a pint bottle with a rubber nipple and fed one pint of new milk three or four times daily, adding a tablespoonful of the solution to each pint of milk. Another treatment recommended is a dose consisting of laudanum ½ dram, tincture of catechu ½ dram, castor oil ½ ounce, given in warm milk as a drench. An English authority states his belief that the entrance to the system of the germ that causes this mischief may be made by the mouth, as well as the navel, and he is satisfied that, by washing the udder and teats of the dam with a solution of one of the coal-tar disinfectants or sheep dips before the calf or foal is allowed to suck, and daily for a week or two, the danger from scours and joint-ill may be greatly reduced, if not entirely avoided. As before stated, we have little faith



Dairy Shorthorn Cow, Janet (imp.).

At nine years old. In herd of Central Experimental Farm, Ottawa.



Dairy Shorthorn Heifer, Molly 3rd.

At three years old, with second calf



### Character and Treatment of Swamp or Muck Soils.

In the Province of Ontario, as in most other Provinces and countries, there are hundreds of thousands of acres of swamp lands, and, while some of these have been reclaimed, and become among the most productive of our soils, the attempt to do the same in other cases has resulted in disheartening failure. Swamps there are that have been drained, and yet, though appearing rich from their dark color, seem to lack in some of the essential elements for the production of good crops.

A bulletin (No. 178) dealing with the nature of these soils and their treatment, has recently been issued by the O. A. C., Guelph, prepared by Prof. W. P. Gamble, and A. E. Slater, B. S. A. In this bulletin the claim is made that, though the cultivation of ordinary farm crops has been abandoned as unsatisfactory on many drained swamp lands, yet there is not the slightest doubt that these soils, if properly understood and cultivated, would form a valuable asset of wealth to the Province.

The term peat, swamp, or muck soil, is applied to a class of soils formed almost exclusively of the more or less decayed residues of vegetation, as roots, leaves and aquatic plants, but especially mosses, particularly partially-decayed sphagnum moss. Analysis of such soils shows, for the most part, a very high percentage of nitrogen, a fair supply of phosphoric acid, and a deficiency of potash. Though the stores of total nitrogen are so great, it is not available, being mostly locked up in inert condition. Some muck soils show strong acidity, but this is not generally the case in Ontario.

The productiveness of muck soils can be judged fairly well by the nature of the subsoil. Where underlaid with clay, yields are frequently excellent. A sandy subsoil invariably yields poor results. And, again, the deeper the black layer, the poorer the crop.

The writers of the bulletin have conducted a great many fertilizer tests on swamp soils, and they have also received for analysis samples of such soil from over 900 farmers of the Province, sent in from at least sixteen counties.

In summarizing the results of their work, attention is drawn to the value to the farmer of having an analysis made of his peaty soil. It is also pointed out that some crops, such as hay, roots and vegetables, often succeed well on such lands, while grain shows a tendency to run to straw, with little grain in the head.

#### CAUSES OF UNPRODUCTIVENESS.

A summary of the causes of unproductiveness, with suggested remedies, is given at the close of the bulletin, as follows:

1. A deficiency of potash and of available phosphoric acid, both of which frequently need to be applied in the form of commercial fertilizers.
2. An absence of nitrifying germs which act on the inert nitrogen present in the organic matter and convert it into nitrates, a form readily assimilated by plants. The application of farmyard manure or garden loam is needed in this case, together with frequent cultivation.
3. A water-logged condition, owing to the permanent water-table being too near the surface, and thus checking root development and preventing aeration of the soil. Lower the water-table by efficient drainage.
4. A dry, loose condition of the soil, which results in lack of moisture through inability to raise water by capillarity. This condition frequently results from too rapid draining, and subsequently the complete drying out of deep areas of muck. Gradual draining is desirable.
5. The laying of tile in the muck itself, which results in imperfect action of the drain, owing to the inability of the water to penetrate into the drain.
6. Acidity, owing to the presence of an excess of organic acids. This condition is not common with Ontario muck soils. Liming is the remedy.
7. The presence of injurious plant poisons in the soil, as the lower oxides of iron. Frequent cultivation and exposure of the material to the air results in oxidation, and removes the evil.
8. An undecomposed condition of the soil, and the presence of much woody fibre, and thus a general coarseness of the soil particles. Drying out is apt to result. Frequent cultivation, and the application of farmyard manure has a beneficial action, hastening decomposition.
9. The lodging of grain and a light and poorly-filled ear, due to the excess of nitrogen over mineral constituents. An application of potash and phosphoric acid is beneficial.

It will come as a surprise to many to know that silos are in use in Ireland. In a lecture before the Tipperary Farmers' Society, H. de Burgh, J. P., gave detailed instructions regarding the filling of silos. Clover and grasses, unchaffed, are used, and the filling is done gradually, so that the heat necessary to insure sweet silage is developed, and can be regulated. Reference was made to silos with a capacity of 600 tons.

### Sugar-beet Culture.

Editor "The Farmer's Advocate":

As years go on, the growing of sugar beets in Kent and Essex Counties is passing from the experimental stage. In certain localities, they are grown in rotation with other crops; some farmers even go so far as to claim that, in the rotation there is no other crop that will take their place; that, as a subsoiler, they are more valuable than alfalfa or clover. Up to the present time farmers have paid no particular attention to the fertilizing of the beet crop, but just now there is much talk as to the value of using a commercial fertilizer, what brand to use, and how to apply it. A few farmers tried it last year. Some sowed it broadcast before working up the land, 500 to 600, and even 800, pounds to the acre, but it did not much more than pay for the application. The Michigan farmers, who have been growing beets for fifteen years, have to a certain extent solved the fertilizer problem. They started out by sowing broadcast, but found that it did not pay. They use now a fertilizer attachment for their drills, sowing both beet seed and fertilizer at the same time, sowing from 100 to 200 pounds to the acre. A balanced fertilizer is used, composed, in most cases, of phosphates, potash, and nitrate of soda. The aim is to give the young beet a good start. The fertilizer being in close contact with the roots of the young plant, they feed on it, until they get deep enough in the ground to take care of themselves. After the plant is a month old, it draws its substance from 8 to 10 inches below the surface, and at two to three months from one foot to eighteen inches, and at maturity as deep as three feet. The rootlets, unlike corn, which cover the entire surface of the ground, extend out into the beet rows but very little, so that fertilizer applied broadcast, as far as the beets were concerned, would be more than half wasted. In growing sugar beets, one should prepare his land the year before. A clover sod may be turned down in August, three to four inches deep; fall-plowed to the depth of 10 to 12 inches, working the top up fine as soon as possible in the spring, using some shallow cultivator; plant about May 1st. When the second leaves appear, have them thinned to ten inches. This is an operation which must not be delayed. Hundreds of dollars are lost each year by not having them thinned in time. Cultivate for the next month and a half, once a week; have them hoed again in August. They should be fit to dig about October 1st. Plow them out before topping; have them topped with a knife; this is a little more expensive than topping with a beet-topper or hoe and plowing out afterwards, but is the best, there being a much smaller percentage of beet wasted in the topping. If selling flat rate, they should be delivered and weighed as soon as possible after digging, as they dry out very fast; but, if sold by sugar-test, this does not so much matter, as you get paid for the sugar in the beets.

R. H. ABRAHAM.  
Kent Co., Ont.

### Seed Corn and Seed-corn Trade.

Editor "The Farmer's Advocate":

Kindly allow me a short space for a few thoughts respecting the late corn show in Essex, and also the seed-corn trade in general. Is it not strange that those persons who took all the best prizes at the late corn show, as a rule, have nothing to sell which they can recommend to the public to grow. A few ears are selected with great care, and laid away carefully in a dry place, where they can receive the advantage of the heat from the kitchen stove, and are taken to the show and get all the valuable prizes, while the general crop in the crib would not, under the best and most favorable conditions, show a 50-percentage of sound seed?

I know for a fact that the sweepstakes ear of the show came from a crop which, when put in an ordinary crib, is very poor feed corn, and I doubt if 5 per cent. of it would grow. Again, as to the manner of judging. If you could grow ears that weighed two pounds each, you would stand no chance of getting a prize, because all ears over nine or, maybe, ten inches in length, of the dent varieties, are scored out by an assistant—i. e., turned upside down—and never looked at by the judge. In a crop running, say, 150 bushels of ears to the acre, if one expected to get a prize, he would, of necessity, have to pick out what those who grow big crops would call rubbings—that is, ears about seven inches in length, and weighing about eight or ten ounces each.

Ninety-nine per cent. of the farmers who grow big crops of corn, and have corn to sell that will grow and make a perfect stand for either grain or ensilage purposes, select for seed the finest, largest ears they can get, if the grain is a good length on the cob. The reason we like a long kernel is that corn of this type shells more to the measured bushel.

If the soil is extra fertile, and the season is favorable for growth, the ears will be not only large in circumference, but the best specimens will reach twelve inches in length, and the crop will yield from 125 to 150 bushels to the acre. In

stances have been known where a field of nine acres extra-well-prepared, and well cultivated, gave eighty bushels of shelled corn to the acre, the field having been carefully measured, and the grain weighed for market. It is unfortunate that, after all that has been said and published in "The Farmer's Advocate," so many people are depending on shelled corn for seed purposes. Corn is an extremely sensitive grain to climatic conditions. The year 1909 was one of the worst in my experience, the months of September and October being abnormally cold, and very unfavorable to the proper drying of the cob and grain. People put off husking as long as they dared, and yet the crop went into the crib with the cob containing probably fifty per cent. more moisture than in 1908. And yet dealers have been shelling and shipping away corn for the past two months. With no drying weather from December 1st to March, what can be expected from such seed but a miserable failure? As a rule, farmers put the whole crop in the crib. The dealer comes along and offers ten or fifteen cents over the price of feed, and the whole thing, rubbings and all, goes through the sheller, and is bagged up and sent to the seed-houses, with failure the result. It is also a well-known fact that corn will spoil very much more quickly in the bag than in the bin.

There is a great deal of fraud connected with the seed business, as well as with the nursery or fruit-tree business.

A dishonest dealer will buy a job-lot of trees, and label them anything the customer wants. A seed dealer may advertise corn or other seeds as his own growth, with scores of varieties and years of experience, greater than the years of his life, and yet he may never have grown on his own or anyone else's land a bushel of any kind of seed, and our advice is get the advertiser's record before you trust him, and never buy seed corn, except on the cob, and be equally particular never to shell till ready to plant. L. C. PALMER.  
Essex Co., Ont.

### Power to Run Grain Crusher.

Editor "The Farmer's Advocate":

I notice in your issue of April 7th the question asked, "What horse-power gasoline engine to get to crush with?" and I think your answer very misleading, because I know, if a man bought a 3-horse-power engine, thinking he was going to grind, he would be very much disappointed. He could grind, but very slowly—too slow to be profitable. In my opinion, he would want twice that power to do much of a business, or, if I was buying a Canadian engine, I would not buy less than an 8-horse-power. But, for a farmer who intends to grind, to buy a 3 or 4-horse-power engine, he is getting something he does not want, as the larger engine will do the light jobs, as turning the cream separator, pumping water, turning fanning mill or grindstone, as cheaply and well as the small engine; and then, if you want to do heavy work, you have power to do it with, although, with an 8-inch-plate grinder, you can give a 6 or 8-horse-power engine a lot more than it can do. I write this from experience, and in the interest of a brother farmer, and not to criticise your answer.

ROBERT ASSELSTINE.

[Note.—Reference to our answer will show that, while we stated that it was possible to run an 8-inch-plate grinder with a 3 h.-p. gasoline engine, yet an overplus of power was desirable.—Editor.]

### Steel Silo and Frost.

Editor "The Farmer's Advocate":

You wanted to know how the steel silo stood the test during the cold spell this winter. Well, the silage froze badly enough, but I don't think it froze any worse than in cement silos, judging from the appearance of them. Naturally, you would think it would freeze a little further into the silage, the steel being quite thin. We kept our silage nearly level all winter from wall to wall, while our neighbor, with a concrete silo, had a circle all round, and about twenty feet high. One advantage the steel has, it being thin, with the least warmth or sun, it peels off the steel.

Perth Co., Ont.

D. A. CAMPBELL.

The Crop-reporting Board of the Bureau of Statistics of the United States Department of Agriculture estimates, from the reports of correspondents and agents of the Bureau, that the average condition of winter wheat on April 1st was 80.8 per cent. of a normal, against 82.2 on April 1st, 1909; 91.3 on April 1st, 1908, and 87.0 the average condition for the past ten years on April 1st. The decline in condition from December 1st, 1909, to April 1st, 1910, was 15.0 points, as compared with an average decline in the past ten years of 4.5 points.

The average condition of rye on April 1st was 92.3 per cent. of a normal, against 87.2 on April 1st, 1909; 89.1 on April 1st, 1908, and 89.5 the average condition for the past ten years on April 1st.

## THE DAIRY.

### Creamery Experiments.

The Dominion Dairy Commissioner, J. A. Ruddick, has completed arrangements for carrying on an extensive series of experiments during the present season, having for its object the improvement of the creamery industry in Canada. The work will be in charge of Geo. H. Barr, Chief of the Dairy Division, who will be assisted by J. G. Bouchard, creamery expert, and other members of the Dairy Staff. There could be no better assurance that the work will be carried out carefully and intelligently.

Speaking of the proposed experiments, Mr. Ruddick intimated that they would be conducted at a creamery, and at the farms of some of its patrons, somewhat on the lines of the experiments in the cooling and treatment of milk which were conducted by Mr. Barr during the past two seasons, the results of which have already effected so marked a change and improvement in the methods of handling milk for this purpose.

Mr. Ruddick is a strong believer in the value of practical demonstration or illustration in matters of this kind, and he points to the success which has followed the Department's demonstrations in the cool-curing of cheese, and to the work already referred to in connection with the handling of milk.

The creamery industry, in many parts of Canada, is now conducted on what is known as "The Cream-gathering System." It is recognized that the methods at present followed in operating creameries on this system are defective at certain points, and these defects make it difficult to secure the highest results in quality. Many leading dairymen have opposed the adoption of this system on these grounds, but as farmers are determined to stick to it, and it is their right to do so, if it suits them best, it seems desirable that every effort should be made to put the system on the best possible working basis.

"We do not propose," said the Commissioner, "to encourage the substitution of the cream-gathering system for the whole-milk system, but we shall endeavor to improve existing conditions."

The exports of butter have fallen off during recent years, but there is no decrease in the quantity manufactured, and it is just as important as it ever was that the quality should be of the highest class, and that the creameries should be conducted on economical lines, not only in regard to cost of operation, but so as to insure the highest possible return from the raw material supplied.

### Dairy-herd Competition Continued

The Dairy Herd Competition will be continued by the Western Ontario Dairymen's Association. The rules of competition will be the same as last year, but a change in the way of awarding the prizes has been adopted. Printed copies of the dairy-herd prize list and entry forms for distribution among patrons will be sent out later.

There will be two classes, and two sections in each class. The first class is for patrons of cheese factories who furnish the first, second, third and fourth largest amounts of milk per cow, to any cheese factory in Western Ontario, from May 1st to October 31st, 1910. The first section is for herds of 8 to 14 cows, inclusive. Section 2 is for herds of 15 cows or over. The prizes will be: First, \$10; second, \$7; third, \$5; fourth, \$3; prizes the same in each section. Corresponding prizes will be offered in both sections of Class II., for patrons of creameries who furnish the first, second, third and fourth largest amounts of butter-fat per cow to a creamery in Western Ontario during the same time. Then, besides the regular prizes, two sweepstakes medals, a silver one in Class I., and a bronze medal in Class II., will be offered for the best showing in either section of each class. As last year, the average per cow will be calculated upon a basis of the total number of cows from which milk is supplied by each patron during the season. Enter the contest, and help the competition along. It is a good thing, and worth encouraging.

### Montreal Milk Supply.

The production of milk for the Montreal market is increasing. From time to time, new shippers are starting in, more especially from the Eastern Townships; therefore, the supply has kept pace with the demand; in fact, exceeded it at times. Prices of milk and cream have been arranged on the same basis as last season, viz., 15 cents per gallon for milk, and 3 cents per cent. of butter-fat for cream—that is, cream testing 25 per cent., 75 cents per gallon—all delivered in the city, for five months, commencing May 1st. The condensary here is preparing for a large make this season, and will pay \$1.00 per cwt. for milk for the same length of season. A number of creameries and cheeseries have opened, and are receiving a good supply of milk. Prices of dairy products rule high, so that the season opens favorably for the dairymen.

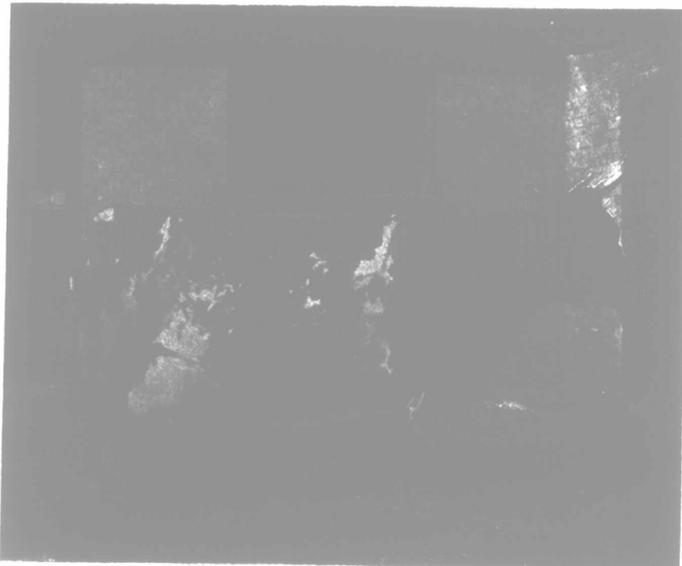
W. F. S.

Huntingdon, Co., Que.

### A Productive Dairy Herd.

Editor "The Farmer's Advocate":

"Breed, feed, and weed," is the advice usually given to dairymen who wish to improve the milking qualities of their herds. And the advice is good. Breeding up to a more productive type of dairy animal, feeding judiciously and liberally, and weeding out those that fail to reach the standard set, has wrought wonders in increasing the average yield per cow in many herds. For the average man, it is the wisest course to take. But there are some people who have skill in judging dairy cows by their appearance, who do not rear their own cows. To keep up their herds, they purchase as required. As an example of successful work in this line, Donald Bain, of Oxford Co., Ont., makes a fine showing. He has been a cattle-buyer from his youth, and, of course, has much better opportunities than the average farmer, both to see and judge stock. For the year ending December 31st, 1909, his herd of nineteen picked-up cows, mostly Shorthorn and Holstein grades, produced 152,296 pounds of milk. The figures are copied from the annual report of the Farmers' Union Cheese and Butter Factory, Oxford Co., which makes cheese in summer and butter in winter, and show an average yield of over 8,015 pounds of milk per cow. These cows were fed moderately (not heavily) in winter, and while on pasture received no supplemental feed whatever. The large milk return was due, not to heavy feeding, but to the superior dairy quality of the cows. It shows that there are good cows in the country, and shows, also, what may be done by selection alone, in securing a fine herd.



Annie Laurie 2nd —15588—

Ayrshire cow, born November, 1901. Official record, 15,131.4 lbs. milk; 598.5 lbs. butter-fat in 365 consecutive days. Owner, Emerson Cohoon, Harrietsville, Ont.

### Western Ontario Dairy Instruction Staff.

The 1910 staff of dairy instructors and sanitary inspectors in Western Ontario is as follows, two new men having been taken on in place of Mr. McKay and Mr. Hart:

Cheese-factory Instructors.—Jas. R. Burgess, Listowel—Listowel Group; A. E. Gracy, Woodstock—Ingersoll and Woodstock Group; George Travis, Tillsonburg—Simcoe Group; R. H. Green, Cayuga—Brantford Group; Geo. M. McKenzie, Ingersoll—Stratford Group; T. F. Boyes, Lambeth—London Group.

Creamery Instructors.—Fred Dean, Guelph—Eastern and Southern group of creameries; M. Robertson, St. Mary's—Northern and Western group of creameries. Chief Instructor—Frank Hens, London, Ont.

Because you have built a silo, do not give up growing roots. The acreage may be reduced, but grow some. A peck of roots a day to a cattle-beast has an effect in promoting thrift out of all proportion to the cost of production, or the proportion of nutrients contained, being appetizing, tonic and laxative. A peck a day is proportionately more profitable than a bushel. As with skim milk, the amount seems less important than the fact that one is feeding some. Turnips for beef cattle and sheep; sugar beets for swine; mangels or sugar beets for dairy cows, and a few carrots for the horses, will prove a very profitable crop.

## GARDEN & ORCHARD.

### Express-rates Argument.

Editor "The Farmer's Advocate":

In regard to my evidence before the Railway Commission, on the subject of express rates, it was given offhand, and, in brief, as follows:

Speaking on behalf of the fruit-growers of Ontario, we ask for lower rates of express, and suggest a scale based on mileage, taking as our base a rate of 40 cents per 100 pounds for a distance of 50 miles or under, adding 5 cents per 100 pounds for each additional 50 miles, pointing out that, at present, the rates are uneven to competitive points; they are much lower than to non-competitive points. We urge that this is wrong in principle; that the effect of charging high rates to exclusive points is to encourage the construction of competitive lines of road which frequently are absolutely unnecessary; that, as a result of this, we have in Ontario, in many places, two lines of railroad where one would answer all purposes, and we believe that it would be more in the interests of the people to have lower rates and fewer roads paralleling each other. Of course, this applies to freights, as well as express rates.

We point out that the traffic in fruit has grown to tremendous proportions, compared to what it was when the rates were set. We believe that the express companies are making excessive profits. We do not ask that the company shall carry our goods at a loss, or at anything less than a fair profit, but in the interest of the producer, as well as the consumer, we do not want to pay more than that which affords the express companies a fair margin of profit.

Referring more particularly to the Northwest traffic, I pointed out that our strongest competitor in that market is the California producer, who can lay down his product, even peaches and plums, in perfect condition by freight; whereas we must, for these perishable kinds of fruit, use express. There is a vast market in the Northwest for these fruits, which we grow in profusion in Ontario. We think things should be regulated so that Ontario can supply this demand, instead of California. At present, the carload rate for distribution—that is, a carload from one man, distributed from Winnipeg or other points to various towns in Manitoba—is \$2.25 per 100 pounds on the main line, and \$2.40 per 100 pounds on the side lines in Manitoba, whereas, ten years ago, the rate was \$2.15 to all of these points. The traffic was much smaller, and the goods were carried 400 miles further.

The C. P. R. at that time carried all their stuff around by Carleton Junction. I contended strongly that now, having the short line from Toronto, and with the increased traffic we have, and the greatly-increased traffic that we might expect, we should have a rate of \$1.65, which is exactly what the Dominion Express Co. got out of it for several years when the goods went by Toronto and North Bay, as the Dominion Express Co. had to pay the Grand Trunk 50 cents per 100 pounds out of their \$2.15 for hauling the car from Toronto to North Bay. I pointed out that if they could do this and make a profit on \$1.65 under those conditions, they can still make a profit on \$1.65 rate, with the increased traffic, even though they do have to haul the car themselves from Toronto to Sudbury. That is the only service they would perform greater than they would perform when the goods were going over the Grand Trunk to North Bay; and that service is, I contend, offset, or would be offset, by the increased traffic which the lower rate would secure.

The freight rate from California to Winnipeg is \$1.35, and that is the rate we have to meet; then, we have a further obstacle, and that is the prejudice of the dealers in Manitoba in favor of California fruit, because the California fruit, although acknowledged to be inferior in quality, is very much superior in its keeping qualities. Grown, as it is, in a rainless climate, it is dry, and will stand up for weeks after it is gathered without rotting, whilst our fruit is juicy and luscious in

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proportion, and rots readily, and so must be handled by express, and, in handling, the dealer is bound to lose something, and have a certain amount of trouble which he finds he can avoid by handling the California fruit that does not rot, and causes him little or no trouble or loss. For that reason we must have every assistance possible from the express companies in the way of low rates, and from the Government in the way of reasonable duties, until we can get the business on such a large basis that there will be a special fruit-train running for fruit alone each day.

The market in Manitoba will easily take now as much fruit as a train-load of four or five cars three times a week, if we could lay it down there at competitive rates and in good condition; and the quantity is increasing every year that can be used in that country. There will be no difficulty, and no hardship to anybody. There can be no combination of fruit-growers to raise prices, or anything of that sort, and we can furnish the West all the fruit that they can use, if we can meet for a time the competition of California.

Reverting to the Maritime Provinces, I pointed out we have built up a large business there for our fruits by express. There was a time when we had a rate of 87½ cents per 100 pounds for carloads for distribution, but when the Dominion Express commenced to operate in that country, the two companies put their heads together, and raised the rate to \$1.25, and it has remained at \$1.25 ever since. This was the effect of competition. When there was but one road, the rate was 87½ cents; when we got two companies, the rate was raised to \$1.25, and this is bound always to be the result when there are two firms or two companies trying to make a living out of a traffic which is only sufficient for one. I pointed out that there had been no complaints that the rate of 87½ cents was too low. That rate prevailed for several years, and it was only when a competitive company stepped into the field that the rate was raised, contrary to popular belief of the results of competition. I urged that if they could carry fruit at \$1.25 to the Maritime Provinces for distribution, it could be carried to Manitoba for \$1.65, for the distance is only 300 or 400 miles greater, and that 300 or 400 miles is a straight haul; and the traffic to the Northwest can be made ten times as great as the traffic to the Maritime Provinces.

When the solicitor for the companies urged that the rate of \$1.25 to the Maritime Provinces was too low, I pointed out that they had previously done the same service for 87½ cents, without complaint. Reverting, then, to the question of prompt payment of claims, we fruit-growers urge that the express companies should not shelter themselves behind the plea that they are not responsible for delays causing loss to fruit, due to the railway company in making connections. We pointed out that the railway companies and the express companies are practically one, and that any loss resulting from delays caused by anything within the control of the railway company should be paid for by the express companies; and where the delay occurred through causes beyond the control of the railway company, that we should not be charged express rates, but that the charge should be remitted and the goods carried free, each party standing in that way his share of the loss.

The chairman suggested that the company sheltered themselves behind the ridiculous bill of lading which they now have, but which will be amended.

Other complaints which fruit-growers make are in regard to rough handling and pilfering. The chairman, however, though sympathetic, seemed to feel that it would be difficult for the Board to cope with this matter. The deputation got a very sympathetic hearing, and feel assured that the fruit-growers would receive much benefit from having taken the matter before the Railway Commission.

E. D. SMITH.

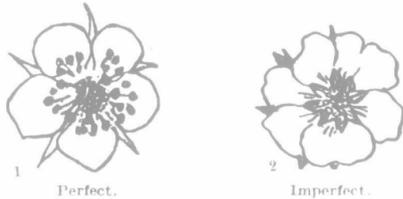
Wentworth Co., Ont.

### Demonstration Orchards in Georgian Bay District.

I. F. Metcalf, the District Representative of the Ontario Department of Agriculture at Collingwood, with the co-operation of the Fruit Branch of the Dept. of Agriculture, at Toronto, has taken over the management of six orchards in as many representative parts of the Township of Nottawasaga. These orchards are to be manured, plowed and cultivated by their owners until just before haying, when a cover crop is to be sown. W. F. Kydd, of Simcoe, has been engaged to look after the pruning and spraying of these orchards, and he is a man who has had wide experience at this work. An effort is to be made to keep an accurate account of the actual expenses, and also of the value of the crop, so that it can be figured out just how much money was made by giving the orchard the best of treatment.

### Twenty-one Years' Strawberry-growing.

Of the long list of luscious small fruits grown to such perfection in Eastern Canada, none equals the strawberry in general popularity. Though readily fruited under almost all sorts of conditions, the demand for home use, city and town markets, and canning factories, is such that there never seems to be enough to go round. Many new plantations will be started this season in farm gardens, and readers of "The Farmer's Advocate" who are beginning, or who wish to improve, will appreciate some practical suggestions, based on twenty-one years' experience at the Central Experimental Farm and elsewhere, given by W. T. Macoun, the Horticulturist, in his 50-page bulletin on strawberry culture. The usual method of propagating is from runners, and the first made root soonest and make the strongest plants. Those selected from the best plants year after year, and grown under favorable conditions, should show improvement over those not selected, but the claims of superiority of so-called "pedigree plants" have not been borne out by trials made by Mr. Macoun. The principle of selection is good, however, and, if thoroughly carried out, will result in an improved strain. He points out, also, that the success of the so-called "Ever-bearing" berries is largely a matter of climate and weather.



"PERFECT" AND "IMPERFECT" VARIETIES.

Very often berries grow ill-shaped and worthless, because the flowers of the variety are "imperfect"; that is, with female organs only, and not provided with stamens, on which the fine dust or pollen forms, and which, falling on the pistils, causes fertilization and formation of fruit. Insects, like bees, and the wind, carry the pollen from "perfect" to "imperfect" flowers, and cause fertilization. By a reference to the illustrations, the difference between the two kinds of flowers is readily seen. It is not necessary to buy imperfect-flowering varieties at all, as there are plants of good sorts with perfect flowers, but if for some reason a grower wants the former, they should be planted with the rows alongside the latter, but they should bloom at the same time.



Proper and Improper Depth for Planting Strawberry Berries.

### ENRICHING THE SOIL.

The site of a strawberry bed should be where the snow will lie in winter, and be well drained. The latter is essential. Warm, sandy soils produce early fruit, but friable loams the best crops. The richness of the soil is the great factor. Land that will grow good root crops will produce good berries. A root crop heavily manured the previous season, or a clover sod fall plowed, will give satisfactory results. Nothing beats well-rotted stable manure, 30 tons to the acre being a fair application, put on early in spring, so as to get it thoroughly incorporated in the soil by tillage. Fresh, strawy manure makes the land too loose, causing the young plants to dry out. Twenty-five to one hundred bushels of wood ashes as a top-dressing, when harrowing, will show beneficial results. An application of 100 to 150 pounds nitrate of soda, broadcasted before the flowers open, is sometimes desirable, if plants are not making vigorous growth. Ground bone, applied at the rate of 200 to 300 pounds per acre, will supply phosphoric acid, before planting, and potash may be furnished by using 200 to 300 pounds muriate of potash, if wood ashes cannot be ob-

tained. By way of preparation for next year's planting, if barnyard manure cannot be obtained, nitrogen and humus may be obtained by plowing down clover, peas, or other leguminous crops, and then using the artificials as suggested. The main thing is to have a rich, mellow soil ready early for spring planting.

### CHOOSING VARIETIES.

In the choice of varieties, one must be guided by circumstances, the purpose for which the berries are to be grown, kinds that do well in the locality, and the best perfect-flowering plants available. Readers will do well to consult at once growers who are advertising plants through "The Farmer's Advocate." Varieties are legion. In the past 21 years, 596 named sorts have been tested at the Experimental Farm. Only 14 of those on trial during the first two years are yet under test. Better kinds have taken the place of the others. Of 11 varieties considered very promising twenty years ago, three are still considered most promising, Bubach, Warfield, and Daisy. The Daniel Boone, after twenty-one years' trial, still does well, and the Williams, tested for 18 years, still ranks as one of the best commercial shipping berries. The bulletin suggests the following lists at present:

Commercial—Bederwood (per.), Splendid (per.), Warfield (imp.), (not suited to light soil), Williams (per.), Greenville (imp.), Bisel (imp.), Sample (imp.), Buster (imp.), Pocomoke, and Parson's Beauty.

Domestic—Excelsior (per.), Splendid (per.), Senator Dunlop (per.), Lovett (per.), Ruby (per.), Bubach (per.), Wm. Belt (per.).

Order your plants early, and plant soon after arrival. If that is not convenient, open the package, and put the plants in a well-drained trench, covering the roots well, so that the crown just shows above the ground. Place them close together, but in single rows. Firm the soil. These plants will have begun to form new roots by the time you are ready to plant. The matted row is the most satisfactory plan. The plants are set from 15 to 18 inches or more apart in rows 3½ to 4 feet apart. Varieties that throw lots of runners, like Warfield, Senator Dunlop and Splendid, need not be planted so closely as those making few, such as Bubach, Buster, Glen Mary, and Williams.

### PLANTING AND TILLAGE.

For a good-sized plantation, mark and cross-mark the rows. Long rows save time in cultivation. When planting with a spade, the man makes the hole, forcing the spade into the ground, and driving it forward and backward. As soon as withdrawn, a boy places the plant in position, and the man presses the soil firmly against the roots with his foot. A surer mode is with the trowel or dibble for opening the hole, whereby the plant is more likely to be set the proper depth, and the roots spread better in the soil. One person can do the job. Great care should be taken to have the crown of the plant just at the surface when pressed in; if too high, it will dry out; if too low, it will be smothered. Our illustration shows the three ways of setting the plants. Keep the soil loose and free from weeds by horse and hand hoe cultivation. Pinch off all blossoms that appear the first season; place the runners where they will root well, and according to the plan (rows or hills) adopted. The plants should not form too dense a row if large berries are desired. With good care and growth, a row two feet wide by autumn should be secured, leaving an 18-inch space between for the pickers next year.

According to a table given, the average crops obtainable, as reported by nine different growers in Ontario and Quebec, vary from 3,000 quarts to 8,500 quarts per acre in a season. Strawberries are a costly crop to grow, but very profitable. A detailed description is given of 120 varieties out of the 596 named and grown at the farm. A post card to W. T. Macoun, Experimental Farm, Ottawa, would doubtless secure a copy of the bulletin (No. 62), by anyone desiring more complete details on the subject than given in the foregoing article, which is intended for immediate application in the farm garden.

### Soil Mixture.

At the short course in fruit-growing, held at Guelph from January 25th to February 5th, Prof. W. H. Day brought out some very salient points about water in relation to soil and crops.

In early spring, the land is water-soaked. The first requisite, then, is to get rid of the excess of moisture. This is accomplished in three ways, by run-off, by drainage, and by evaporation. Only a certain percentage can be got rid of by run-off and drainage, but evaporation, if allowed to go on unrestricted, will exhaust all the available moisture in the soil. The conditions under which evaporation takes place most rapidly are, bright, windy weather, and a compact surface soil. As long as the soil is too wet, evaporation is the farmer's best friend.

Just so soon as the excess of water is got rid

of, evaporation becomes one of the farmer's worst enemies. The sun, in April or May, will evaporate from one-fifth to one-quarter inch of water per day. For thirty days this amounts to over six inches. The average monthly rainfall at Guelph for April is two and one-half inches, for May and June, three inches each. Evaporation will, then, exhaust in one month all the rain that will fall in two months.

In spring, the soil is naturally compacted on the surface, and this is an ideal condition for a time. When the excess of moisture is got rid of, evaporation should be checked at once. The best way to do this is to stir the surface and loosen up the soil, breaking the particles into coarser, looser pieces, which, acting as a mulch, checks the upward movement of the water from the lower layers of earth. Soil is made up of very many particles of earth, with pore spaces between. An ordinary loam soil is from one-third to one-half of its bulk pore-space. This has been ascertained by actual measurement. Each pore-space serves as a storehouse for water. If the soil pores are too coarse, as in a gravel or coarse-sand soil, the water is not held, but goes right down and out as drainage water. In clays, the pore space is too small, and there is not sufficient room to store enough water for plants.

Underdrainage aids greatly in improving the capacity of a clay soil to hold water. It is a remarkable fact that a clay soil becomes more porous by the creation of little runlets through the soil leading to the drains. Deep plowing also aids in making soils porous and increasing their water-holding capacity. When a soil in good tilth is full of water, but not water-logged, the first foot will contain four or five inches of water. That is, if all the water in a cubic foot of soil were extracted, it would fill a cubic-foot vessel from four to five inches deep. This amount decreases as we go deeper into the soil, so that the first four feet of soil will hold about twelve to thirteen inches of water.

If the water required to grow an average crop of grain, three feet high, were all placed on the surface of the soil at once, it would cover the ground to a depth of from eighteen to twenty-four inches. To produce a crop of fruit requires much more water. The rainfall for the four growing months amounts to about ten or twelve inches. There is, then, from eight to twelve inches of water to be secured by the plants from some other source. If evaporation has not been allowed to go on too long in the spring, this extra water will be stored in the soil. Thus, there is always sufficient water to mature a crop each year, if properly conserved. Cultivation as early as possible in the spring, and after each rain in summer, will conserve and insure a continuous and usually abundant supply of moisture.

### A Definite Size in Grading Apples.

Editor "The Farmer's Advocate":

Some years ago, the writer, in an article to the Halifax Chronicle, advocated the necessity of incorporating in the Fruit Marks Act some definite sizes of the principal commercial varieties of apples, as a key to and explanation of the present indefinite term "medium," to designate the minimum size of No. 1 in each variety.

Knowing well that one definite size would not do for all varieties, it was suggested that a list of the principal commercial varieties be printed in the Fruit Marks Act, giving the minimum size in inches and fractions thereof.

The advantages of such an addition to the Act would be obvious. First, the work of the inspectors would be more uniform, and, consequently, easier, since there need be no hesitation resulting from difference of opinion, or the errors of judgment resulting from changes to lots of apples of different size. It is wonderful how individuality operates in judgment.

Even where the parties are disinterested, it is scarcely possible to get any number of men to agree to exactly what size of a certain variety would rank as medium, even where they may be judging the same lot of apples, and at the same time, especially if they have no chance of measuring. The error increases if the apples are in different places, and of a different average size in each place, and the difference of opinion probably reaches its maximum when the apples in one case may be those of a friend, and in another those of an enemy.

I will go further, and say that a packer may throw upon the table a number of barrels of large, average size, and directly afterward a number of smaller, average size, and his judgment of "medium" will differ in the one case from the other. Unless constant recourse is had to some form of measurement, a small, average run of apples will pack out much smaller than a large run.

Second.—It would be better for the packer. He would know just how small to run his No. 1's and 2's, and would put up a more uniform package, even if his apples were of widely different sizes in different lots. This would apply not only to the individual, but to the whole Dominion.

Co-operative associations are being formed in the hope that packing might be more uniform, but it seems to me that uniformity would be more quickly accomplished by the above means. The Inspection and Sales Act defines clearly enough the quality of apple that must go into a No. 1 or No. 2. In regard to spot, roughness, ill-shape, bruises, etc., the directions or provisions laid down in the Act are sufficiently plain to give little excuse for want of uniformity in the above respects. The Act is plain in demanding clean, hand-picked, sound fruit, carefully packed; it is the indefinite terms used to designate size that preclude possible uniformity.

Third.—It would be better for all classes of buyers, from the wholesaler to the consumer. With the better enforcement of the Act, the buyer is becoming yearly more reasonably sure of getting clean, sound apples when he buys a barrel of apples, but, until we get the minimum size stated definitely in the Act, he cannot be sure what size he is buying. One man's "medium" apples may be half an inch larger in diameter than his neighbor's; and two barrels of apples may reach the buyer, both put up in good faith, but differing in size by this much. These surely must be discriminated against by the buyer.

At the present time, the buyer does not know whether a No. 1 barrel of apples will contain apples running down to 2½ inches or 2 inches as a minimum.

One objection made to a definite size being given is that in different seasons, owing to climatic causes, apples grow of a different average size, so that one season there would be a greater number of No. 2's than another season. In such cases, for the sake of uniformity, it would be better to pack the greater number of smaller grade, and put the loss down to the misfortune of having such a season.

Again, it is objected, here in Nova Scotia, that the same variety of apple grows larger in Ontario and British Columbia than in our own Province, and if we took as the minimum No. 1 for the Dominion an apple which might be considered as medium in Ontario and British Columbia, it would be discriminating unfairly against the Nova Scotia apple, compelling, again, the packing of a large proportion of No. 2's. This objection may be answered in two ways. The setting of a standard to the medium of these other Provinces may put us upon our mettle, and lead to the more improved methods of pruning, fertilizing and thinning, and also the questionable sacrifice of the present average proportion of No. 1's and 2's. It is well known in all the markets of the world that Nova Scotia apples, though perhaps somewhat smaller than the same varieties in the other mentioned Provinces, are of such superior quality that, if the size were raised to a good standard, they would easily lead the market.

Or, the size "medium" could be interpreted for the whole Dominion to suit Nova Scotia, and packers in the other Provinces could pack as much larger and better as their enterprise and circumstances would warrant. Other things being equal, where the quality of our apples is known, we are not afraid to compete with any other country on earth, even where our superior judgment and common sense lead us to use the sensible 96-quart barrel.

So much for advantages and objections. The history of the attempts to get a definite size, as far as Nova Scotia is concerned, has been that, at the annual meeting of the Nova Scotia Farmers, in 1909, a resolution was passed to let the law remain, as at present, indefinite. A paper was read at the N. S. Fruit-growers' Association in December, 1909, advocating the idea, and the discussion following did not lead to any conclusion. In Ontario, some of the co-operative associations have adopted sizes for themselves, but this is not universal. A step in advance this winter has been the distribution among the principal fruit-growers of a list of some twenty-five of the principal commercial varieties, asking them to give in inches for each variety the size corresponding to very large, large, medium, small, and very small. In this way, Chief McNeill hopes to get at an average on which to base a definite size for each variety. It is to be hoped that the move may be successful.

Annapolis Co., N. S. R. J. MESSENGER

### Cultivation, Cover Crops and Fertilizing.

The emphasis laid on spraying in connection with the report of our work in "The Farmer's Advocate" demonstration orchard last season, must not, as we reminded the Fruit Institute at Lambeth, be taken to imply that all the credit for the results was due to this factor. No small part should be credited to the cultivation given. Up-to-date fruit-growers cultivate their orchards as a matter of course. The proper treatment of apple orchards is to plow them early in the spring, harrow frequently, and disk two or three times, keeping a mulch of loose earth until, say, the middle of July; then sow a cover crop of

clover, vetches, alfalfa, rye, oats, or almost any kind of crop, to be plowed under the following spring. In northerly latitudes the cover crop should be sown earlier, say, the latter part of June, in order to check the growth of wood and hasten maturity of the wood, so that it may be saved from winter-killing.

The common practice is to leave the orchard in sod, generally pasture. This is bad for the orchard, as it is bad for a wood-lot. Grass and trees do not well agree; the grass nearly always gets the better of the trees, unless these are thick enough to prevent the grass from growing. Alfalfa is worse, even, than the grass, and should never be sown in an orchard, except as a cover crop, unless it is desired to kill the trees.

Why should we cultivate the orchard? There are three main objects: First, to conserve moisture; secondly, to promote aeration of the soil; and, thirdly, as a result of these, to liberate plant food. We might say that a fourth object is to keep down weeds which rob the soil of moisture and plant food, but this should rather be regarded as an incidental result. There are two ways in which moisture is passed off from the soil: First, by evaporation from the surface of the ground; secondly, by transpiration from the stomata or breathing pores of the leaves. Every tree in the orchard, every plant in the field, is a pump, sucking up moisture during the growing season, to be transpired through the leaves, after having carried up plant food in the form of a dilute solution. When moisture is lacking in the soil, the tree is, therefore, both starved and parched. In order that we may prevent waste of moisture from the soil by evaporation, it is important to have a loose mulch two or three inches deep spread over the surface of the ground to intercept the upward capillary movement of soil moisture, and protect it from the evaporating influences of sun and wind above. The second purpose that is served by moisture in the soil is the liberation of plant food by conversion into soluble forms. The soil is a laboratory where important chemical and bacterial processes are going on. These cannot proceed, however, in the absence of a reasonable supply of moisture. We must conserve moisture, therefore, first, that plant food may be liberated; secondly, that it may be carried up in the form of sap to the leaves of the plant.

Aeration is soil ventilation. Oxygen is distributed through the soil as it is through the atmosphere, only not so abundantly, and is necessary for the chemical changes by which plant food is made available. A crusted, hard, dry soil is not likely to be well aerated. Cultivation, by preserving a loose mulch of surface soil, not only conserves moisture, but favors the freer liberation of plant food, especially in the early part of the season, when the tree requires both plant food and moisture in abundance to produce growth of wood.

### SEVEN DIFFERENT METHODS OF HANDLING ORCHARDS.

A bulletin from the Vermont Experiment Station has suggested seven different methods of handling orchards. First, clean tillage throughout the season; second, tillage with cover crops; third, tillage with intercropping; fourth, grass mulch; fifth, sod mulch; sixth, grass removal; seventh, sod pasture.

Clean cultivation throughout the season has the disadvantage of finally exhausting the humus and nitrogen from the soil.

Tillage with cover crops is an ideal method for general use.

Intercropping between the rows of trees is all right with a young orchard, but a gradually-widening strip should be left for the use of the trees. Hoed crops are perhaps the best for intercropping.

By a grass mulch is understood the practice of mowing the grass which grows in the orchard, and spreading it around under the trees, extending somewhat beyond the tops. When not enough grass is produced to form a thick mulch, other mulch material is to be brought in. This finally becomes rather expensive. Good results have been produced by the mulch system, but it has the disadvantage of drawing the roots of the trees close to the surface, where they are liable to suffer from drought and from freezing, unless the mulch is kept quite thick.

Sod mulch is described as the system where only that mulch material is used that is produced in the orchard.

Grass removal consists in the cutting of hay, and is rarely or never to be recommended.

### CULTIVATION BEST IN MOST ORCHARDS.

Experiments of the N. Y. Experiment Station showed, in five years' comparison of tilled orchards with sod mulch, 36.3 barrels per acre more fruit from the former, or a gain of 50 per cent., and the apples were better. It cost, on the average, for five years, to handle the two plots, \$17.92 per acre for the sod mulch, and \$24.47 for the tillage and cover crops. The \$6.55 extra cost, however, was small, compared to the difference in yield and quality. The cost of orchard

maintenance was 27 cents per barrel on the sod mulch, and 24 cents on the tilled-and-cover-crops area. The trend of the yields from 1904 to 1908 was downwards on the sod mulch, and upwards on the tilled areas.

Somewhat similar results were obtained from the orchard-survey work in three counties in Western New York, where it was found that orchards tilled for ten years or more gave 45 per cent. larger yields than those in sod ten years or more, but otherwise well cared for, while those tilled five years or more gave 15 per cent. larger yields than those in sod five years or more. Of those orchards in sod and pasture, best results were shown by those pastured with hogs, second best by those pastured with sheep, while those pastured with cattle gave poorest results of all, poorer, even, than where the grass was removed by cutting. One reason the orchards where hogs were kept made such good showing was that these were partly cultivated by the swine, which also reduced the loss from codling moth by destroying the worms in many fallen apples. From the results of the orchard-survey work, the authorities concluded that, while some few orchards, exceptionally situated, as, for instance, on hill-sides or rough ground, might give more profit from pasturing or mulching than from cultivation, still taking into consideration the expense of tillage, the extra cost of barrels, labor in handling, and so forth, four-fifths of the orchards now in sod in those counties surveyed would give greater net returns if tilled.

### Our Spraying Operations.

The first spraying in "The Farmer's Advocate" demonstration orchard this year was commenced on Friday, April 8th. It should have been started a little earlier, but the unwonted forwardness of the season, owing to mild weather in March and early April, has rather upset calculations all round. The aim is to put on this first spray of lime-sulphur just as the leaf buds are about to burst. On the Greenings and early apples we found the buds had opened and were showing some leaf-surface, in some cases half an inch or more, so instead of applying the lime-sulphur spray at the spring strength of 1 to 9, as recommended by Mr. Caesar, we put it on about 1 to 11 for the first two barrels, and afterwards 1 to 15. Little injury was to be seen, on examination, at the end of last week. A slight scorching or browning was observable on a few of the outer leaves. Experts say the leaves are more hardy just after opening than a few weeks later on. It is probable that it would have been advisable to use the lime-sulphur of a strength of 1 to 12 on the whole orchard, as this would have more effect on the oyster-shell scale than the weaker wash. However, it was thought well to be on the safe side. We shall be pleased to hear from readers who have used lime-sulphur in various degrees of strength after the buds have burst.

The second spray recommended by Mr. Caesar is lime-sulphur, summer strength (1 to 30 or 35), or Bordeaux mixture, either being applied with a poison. This is supposed to be put on just as the blossom buds are about to open. We propose to omit this second spray on part of the orchard. The most important spray of all is the one just as the blossoms fall, this being for the especial benefit (?) of the codling moth, though also for scab. The idea, then, is to use poisoned Bordeaux or poisoned lime-sulphur in rather weak strength, drenching the trees thoroughly, and getting some of the spray into the blossom-end of every small apple. For this spray we propose to use chiefly lime-sulphur, about 1 part concentrated solution to 35 parts water, adding to this arsenate of lead, two pounds to the barrel of mixture.

## POULTRY.

### Sulphur for Egg-eating Hens.

Editor "The Farmer's Advocate":

As a subscriber to "The Farmer's Advocate," and one who reads it pretty well, deriving a good deal of benefit from its pages, my attention was drawn to an article on "Egg-eating Hens," on page 617 of the April 7th issue, and would like to submit my experience on the same subject. In a pen of 18 hens, eggs kept disappearing each day, until finally I got no eggs at all—nothing but a wet nest, with every sign of a good feast. I fed a handful of flour of sulphur to a two-quart measure of chopped oats and barley, wet with skim milk or buttermilk, just so as to make it thick; and the result, from 12 to 17 eggs a day, with a clean nest. I fed the sulphur for four or five days, then stopped a while, and repeated at intervals. I find this is better than cutting their heads off, so please pass it on. J. H. G., Essex Co., Ont.

### Poultry Housing.

Editor "The Farmer's Advocate":

When anyone is getting a good egg yield in winter, the first question he is often asked is, "What are you feeding?" or "What breed do you keep?" Personally, I think feed and breed should take second place, and the question be asked, instead, "How do you house your birds?" I think, myself, that the housing question is of the most vital importance. Last spring I rented a house about two miles from the city. There was an old shed, very tall, with a decided leaning to the south, a most unsightly structure, and I asked permission to pull it down and build up a henhouse of my own design. In reality, it was a design from one of the bulletins I got from the O. A. C., Guelph. During the building of the house, some of my neighbors asked, "How do you propose to heat it?" and I said, "I don't propose to heat it at all." And some of my wise friends shook their heads, and prophesied disaster for the greenhorn (me). However, I built my house 14 x 18, 7 feet high in front, and 6 feet at back; one window in front south side, and one in the south-west corner. By this arrangement, I get the sun from the first streak in the morning to the last declining ray in the evening. My front window had eight lights, but I knocked two of the top ones out, and nailed a piece of cheesecloth in the opening, thus giving good ventilation, especially as, being a bad carpenter, I failed to bring the roof down tight to the back boards, and in places there was a space of from 1 to 1½ inches; but, rather than being a fault, it was only improving the ventilation. I rigged the perches on the east end, with drop-boards and nest boxes beneath them. I got my girls to carry garden soil into the house, and all together, the floor was covered to a depth of about four inches, to which I added another four inches of straw. I must here state that the floor of the house is raised 2½ feet from the ground, open on the south side, and boarded on the other three sides. I had a trap let into the floor of the house, so that on mild days my birds could get right down to Mother Earth and scratch to their hearts' content. Needless to say, by this arrangement, my birds, besides having a comfortable house, also have a fine scratching-shed, and shade during the hottest part of the day in summer.

Now, the question is, has my house, without the aid of artificial heat, been a success? I must say, most decidedly so. I put 22 birds in this house last fall; 11 were hatched on the 17th of April, 1909, and 11 on the 29th of May, and up to March 7th I had 715 eggs. I have not had a single sick or mopy bird in the whole bunch. I have an incubator running at the time of writing, with 124 of my own eggs, 108 of which are fertile by test. I invited one of my friends (who didn't like to believe I was getting eggs from hens in a cold house) to pay a visit to my henhouse, and see for himself how my birds fared, and didn't he get a surprise. He came on one of the coldest nights we have had this winter; it wasn't below zero, but it was a real dirty, damp, cold, east wind. As soon as I opened the henhouse door he said, "Why, you have your place heated, after all; I thought you would." But it was amusing to watch his face when I told him it was not heated artificially, but only from the animal heat from the birds themselves. To say he was surprised is only a mild way of putting it, and I think he went home, if a sadder, a decidedly wiser man.

Now, what have my neighbors been doing in their warm houses? First, how are they warmed? In the majority of cases, the hen-roost is a part partitioned off from the cow-stable. Go into such a place at night, take a hen off the roost, and you will find her damp with perspiration. Is that healthy? In a great number of cases the stable is badly ventilated, and cows and hens breathe the same air over and over again. Is that healthful? In a great many cases the henhouse is cleaned out once or twice a year, and the floor is nearly always damp, and an offensive smell rises from the droppings and urine of the cows mingling together. Is that healthful? I think not.

Would you like to live under such conditions yourself? I think not. I am sure none of us would like to be cooped up for five or six months, or even days, under such conditions. If we want to fight the great white plague, we must have fresh air, clean surroundings and wholesome food; and where do we find the ravages of consumption worse than among fowls, and is it a wonder, when we consider the conditions under which they are kept?

Remember, you have the chance of a breath of fresh air whenever you like to open the door. Not so Biddy; an open door to her under such conditions means a chill, with its consequent evils. Remember, also, that fresh air, good food and comfortable surroundings will fill the long-felt winter want—a full egg-basket.

Carleton Co., Ont. MARTIN TREWHITT.  
[Note.—Pressure of space has occasioned delay in the publication of this article, which accounts for the egg record not being brought down to date.—Editor.]

## APIARY.

### Elementary Instructions in Bee-keeping.—IV.

#### ADVICE ON EQUIPMENT.

Before purchasing any bees, it is better to read a good book on the subject. Don't choose one that is out-of-date; to make a success with bees, up-to-date methods must be practiced. Some books are not intended as instructive for beginners. There really are but few books written expressly for the incipient beekeeper. The "A B C. X Y Z of Bee Culture" is one of the best books for beginners that I have read. "Langstroth on the Hive and Honeybee," Dadant revised edition, also is good. The publishers of this paper will be pleased to send any bee-book at regular price, plus postage. After you have gotten your book, study it thoroughly. Don't read it like a story-book; it must be read and reread with real enthusiasm and interest in the subject.

It also is a good idea to send to manufacturers and dealers of bee supplies for their catalogues. I did that, and got much valuable information from this source. Let me warn the beginner not to purchase a patented, newfangled hive or other device that is not approved of in a reliable text-book. I made some mistakes here, and to my loss, of course. And I nearly made a greater mistake yet by adopting a much-lauded hive (praised by the inventor in his advertising circulars). The advantages supposed, or at least, asserted, were made so convincing that I thought I would not have much surplus honey unless using this particular hive. The fact is, good crops of honey can be secured with this kind of hive, but this is equally true of any other good hive. Another thing, if a patented hive is adopted, the user can purchase from one manufacturer only, and that generally at an advanced price.

The hive most used, and as good as any under average conditions, is the dove-tailed, of Langstroth dimensions. Use the eight-frame size; the ten-frame hive is much used, too—in fact, I use it myself—but, for northern latitudes, and for comb-honey production, the eight-frame hive is about right. I recommend it for beginners.

For the supers, the top parts of hives, wherein the sections are put, use the kind that take the standard 4½ x 4½ sections. You see, there is an advantage in using standard goods. They can be purchased of every dealer, and at a less price, too.

Another implement that is absolutely necessary is the bellows bee-smoker. Don't think you can do without it. There is sometimes offered a "cold-blast" smoker; it costs about 50 cents, while hot-blast smokers cost about double. But my advice is not to use the former. Bees are not so easily subdued with cold smoke, and the beginner needs something that can be depended on when the bees become roused.

Of course, a veil is something that anyone handling bees finds necessary. Again, I will caution beginners not to use cheap goods simply because they are cheap. Buy a veil with a silk front; it offers the least obstruction to the vision. Mosquito bar is sometimes used for bee veils; it does not wear well, and has only cheapness to recommend it. It is difficult, and hard on the eyes, to see through it. Get a broad-brimmed summer hat, over which put the veil, and leave it on. This makes a handy "veil-hat."

The beginner will need gloves, too. Gloves and all clothing should be smooth, not fuzzy wool or felt, and not black. Never use new overalls or smocks; they have an odor very objectionable to the bees. Wash before using. Supply dealers sell regular bee-gloves. They are made of material through which the bees cannot sting. I used gloves only two or three times. You see, they are rather a hindrance in work, and should be discarded, if stings do not cause too much trouble.

Wisconsin. F. A. STROSCHEIN.

## THE FARM BULLETIN.

### A Graduate School of Agriculture.

The fourth session of the Graduate School of Agriculture, under the auspices of Association of American Agricultural Colleges and Experiment Stations, will be held at the Iowa State College, Ames, Iowa, July 4 to 29, 1910. The new Hall of Agriculture, erected and equipped at a cost of \$375,600, will be the seat of activity during the session, but the other buildings and laboratories of the Departments will be available for instruction. The purpose of the Graduate School of Agriculture is to give advanced instruction in the Science of Agriculture, with special reference to the methods of investigating agricultural problems and teaching agricultural subjects. Instruction will be given in eight main lines: Agronomy, Plant Pathology and Physiology, Animal Husbandry, Poultry, Horticulture, Dairying, Rural Engineering, Rural Economics, and Sociology. Attendance at the sessions of this school is limited.

to persons who have completed a college course and have taken a bachelor's degree, except to non-graduates who are recommended by the faculty of the college with which they are associated, as properly qualified to take advanced work in agriculture. All correspondence relating to membership in this school should be addressed to Professor W. H. Pew, Registrar, Graduate School of Agriculture, Ames, Iowa.

### 1909 Crops Turned Out Well.

A bulletin of the Census and Statistics Office, issued April 13th, shows that at the end of March the quantity of wheat in farmers' hands in the whole of Canada was about 18.28 per cent. of the crop of last year. This is 30,484,000, out of 166,744,000 bushels, as compared with 20.23 per cent., or 22,747,000 bushels, out of the harvest of 112,434,000 bushels in 1908. Of oats, there was 40.03 per cent., or 111,199,000, out of 353,166,000 bushels, as against 43.62 per cent., or 109,222,000, out of 250,377,000 bushels last year. Of barley, there was 29.81 per cent., or 16,517,000 out of 55,398,000 bushels, as against 33.56 per cent., or 15,692,000 out of 46,762,000 bushels last year. Of buckwheat there was 1,835,000 out of 7,806,000 bushels, being 23.50 per cent., as against 29.03 per cent., or 2,078,000 bushels out of 7,153,000 bushels last year. Of corn, which was nearly all produced in Ontario, there was on the farms at the end of March 3,604,000 bushels, out of a total crop of 19,257,000 bushels. Of potatoes there was 43,289,000 out of 99,087,200 bushels, or 43.68 per cent., as against 44.10 per cent., or 32,542,111 bushels out of a crop of 73,790,000 bushels last year. Of turnips and other roots, there was 15.93 per cent., being 17,166,000 out of 107,724,600 bushels, as against 39.18 per cent., or 39,671,000 bushels out of 101,248,000 bushels last year. Of hay and clover, there was 23.51 per cent., being 2,793,000 out of 11,877,100 tons, as against 34.51 per cent., or 3,952,000 tons out of 11,450,000 tons of the crop of 1908.

It is estimated that 95.87 per cent. of the wheat crop of the Dominion in 1909, equivalent to 159,868,000 bushels, was of merchantable quality; of oats, 90.86 per cent.

The report of the Department of Trade and Commerce shows that there had been inspected at Winnipeg and points West, for the seven months ended March 31st, 69,514 cars, or 74,032,110 bushels of wheat; 12,154 cars, or 23,092,600 bushels of oats; and 3,118 cars, or 3,741,600 bushels of barley. At the same date last year the figures were 61,098 cars or 64,152,900 bushels of wheat, 9,152 cars or 16,473,600 bushels of oats, and 2,576 cars or 3,091,200 bushels of barley.

Of the total production of wheat in the Northwest Provinces last year, 96.48 per cent. was merchantable; of oats, 95.13 per cent., and of barley, 95.44 per cent., Manitoba showing the highest percentage.

The percentage of the products of the farm in 1909 which was of merchantable quality ranks high for all the crops in all the Provinces, the only exception being potatoes in the Maritime Provinces, where correspondents report heavy losses to this crop through rotting.

The condition of live stock in the Dominion at the end of March was uniformly high for all classes of farm animals, being 93.98 for horses, 91.42 for milch cows, 89.30 for other cattle, 92.43 for sheep, and 92.77 for swine. In 1909 the condition of horses was 81.40, of milch cows 78.70, of other cattle 73.79, of sheep 78.32, and of swine 74.34. The high standard condition of live stock is attributed by correspondents to the mildness of the winter, and to the excellent quality of hay and other fodder, particularly corn, and to the very general abundance of coarse grains and roots.

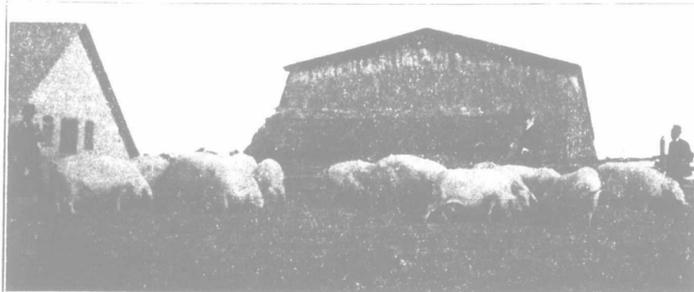
Correspondents report an early opening of spring in all parts of Canada, and in Manitoba, Saskatchewan and Alberta, as well as in the counties of Ontario along Lake Erie and Lake Ontario, about one-half of the seeding was finished at the end of March. A very favorable account of the condition of fall wheat is given for Ontario at the same period, but in Alberta the crop suffered to some extent from drouth at the seeding season, and later from winter exposure.

### An Appealing Prospect.

The newspapers in London, Ont., realizing the importance of agriculture to the country, and the possibilities of great development, particularly in the more intensive branches, have been devoting considerable editorial space of late to the promotion of fruit-growing and other phases of agriculture. "More and more does it become evident," says the Free Press, "that Ontario's lands are too valuable to be devoted to the production of wheat, in competition with the great wheat lands of the West. Instead, the more intensive kinds of farming must be resorted to. . . . Ontario, then, as a great fruit-growing and dairying Province, is not the prospect an appealing one?"

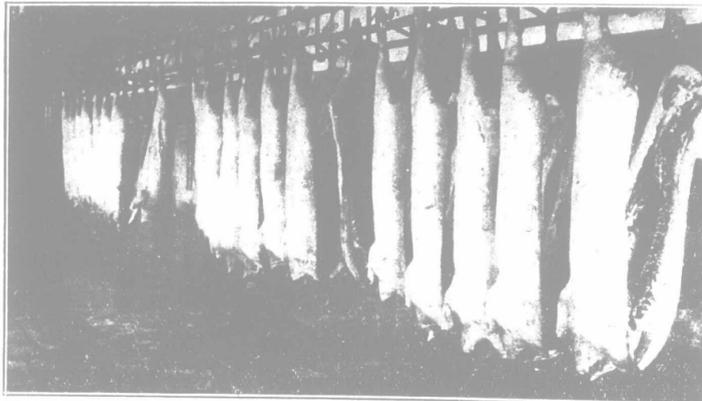
## The Swine Commission's Report.

The long-expected report of the Canadian Commission on Swine Husbandry, in Great Britain and Ireland, and in Denmark, has been laid before Parliament at Ottawa by Hon. Sydney Fisher, the Minister of Agriculture. The Commission arrived in London on June 27th, 1909, and their inquiry was carried on in England, Scotland, Ireland, Denmark and Holland. Information was gathered relating to the marketing of bacon and pork, as well as to hog production and selling. The Commissioners were W. W. Ballantyne, Stratford, Ont.; Wm. Jones, Zenda, Ont.; Gedeon Garceau, Three Rivers, Que.; J. E. Sinclair, Prince Edward Island; and Joseph Rye, Calgary, Alberta—all men of experience in swine-rearing—with James B. Spencer, Assistant to the Live-stock Commissioner, Ottawa, as Secretary and Editor. The importance of the subject in the public mind might be gathered from the fact that Parliament had voted \$10,000 to carry out the purposes of the Commission.



A Herd of Landrace Brood Sows.

The report, which covers some 60 pages, is a model in compactness, lucidity of detail, and in the appropriateness of its numerous illustrated features. The Commissioners have evidently carried out their work with serious earnestness, and Mr. Spencer's experience in agricultural journalism, as an information-gatherer and sifter, and in photography, stood him in good stead. To epitomize in readable form the practice of bacon production and disposal in four or five countries, was no light undertaking, but it has been well accomplished; better, in fact, than in any other public review we have seen covering the same field. As was foreshadowed in "The Farmer's Advocate," when the Commission set out upon its mission, the report is not one of startling disclosures, or the discovery of magic secrets in hog-raising. Abroad, as here, success depends on management, and the important practical details of methods abroad have been repeatedly published for the information of Canadian producers. But the candid reader must be struck with the infinite care as to detail



Offspring of breeding-center dams, after being tested for clean production, are judged by bacon experts.

which Old Country and Danish farmers, on high-priced lands, and purchasing so largely high-priced foods, devote to their business in order that the ultimate cent of profit may be realized. In economical production, there are hog-raisers in South-western Ontario, where clover and corn are the stand-bys, and in other sections of Canada, that could probably beat the Danes on that score, but the whole business in Canada lacks the steadiness and systematic thoroughness of the little European country which, though only about two-thirds the size of Nova Scotia, last year exported to Britain \$28,252,730 worth of bacon, and about double that in butter and eggs, from a farming population of some 1,500,000. Their bacon business is a comparatively recent creation. Shut out of Germany a few years ago, the Danes (Government and people combined) undertook to

regenerate hog-raising and to capture the British market. They did both. From killing 23,407 pigs, worth \$11.80 each, in 1888, the trade grew to a killing of 1,549,550, worth \$14.36 each, in 1908. Danish farmers have been paid more for their hogs per cwt., live weight, than Canadians, for seven years past, according to one table in the report, the average for the latter in 1908 being put at \$5.90, while the Danish quotation is \$6.93. The last quotations given are for July, 1909, being, respectively, \$7.91, and \$8.80. Danish bacon sells for more in London, Eng., the range being \$13.50 per 100 pounds in January, 1909, for Canadian, and \$13.92 for Danish. In December the prices were, respectively, \$17.03, and \$17.52. The proximity of the Danes to the English market gives them an advantage in the style of curing permissible. Figures are given of the cost of interest, labor, management, etc., for handling hogs in the Danish co-operative factories, varying from \$1.10 per hog in a 10,000-pig-per-year factory,

to 60 cents per hog in a factory handling from 90,000 to 120,000 hogs. The value of offal (heads, feet, lard, entrails, bones, tongues, etc.) vary from \$1.75 per hog to \$2.25. Co-operative pig-breeding, co-operative feed-buying, and co-operative hog-selling and packing, did the trick for the Danes.

Under heavy penalties, the Danes bound themselves to stick together, and they did, under strong, well-paid managers. Salesmen acting for several factories, have received salaries as high as ten thousand dollars per year.

Co-operation, as our readers are aware, is also succeeding well in Ireland, but the success attending the rearing of bacon hogs in many parts of England, Ireland and Scotland is due mainly to the quality and the care exercised in breeding, feeding and management. The use of barley, mill-feeds and skim milk is conspicuous in the rations reported. The different countries visited are not without troubles in the pig business, but they do not quit; they set about discovering the weak points and applying the remedy. In concluding their report, the Commissioners feel warranted in suggesting the following remedies for the improvement of the swine-rearing industry of Canada:

1. The adoption on the part of the packers of an attitude of sympathetic co-operation between themselves and the producers, whereby every possible encouragement would be given farmers to increase the quantity and improve the quality of their hogs. This would involve a constant, earnest desire and readiness to afford every facility on their part in co-operation with the producers to investigate and solve problems which may give rise to dissatisfaction. It would require the adoption of careful grading of the prices of hogs through the year, guarding against discouragingly low levels. It would require the control of buyers, and the recognition of quality in the prices paid for the hogs.

2. The co-operation of farmers in engaging a salesman for their hogs, as is carried out by the Eastern Counties Farmers' Association of England.

3. The adoption of the system of selling swine in the open market, as applied to cattle and sheep. By the co-operation of neighbors, carloads could be sent forward at regular intervals.

4. The establishment of co-operative packing-houses, as conducted in Denmark and Ireland.

Copies of this report may be obtained by a request for it to the Minister of Agriculture, Ottawa, by post card or letter.

A big legal battle is on between the Ontario Government, acting on behalf of Kent County farmers, and the old Canada Company. The Canada Company claims that when it sold the land to farmers it reserved all mineral rights. It has been selling to oil and gas companies the right to bore wells on farms, hence the clash.

### The Maritime Horse Show.

The Maritime Horse Show was held in the Winter Fair Building, Amherst, N. S., on April 6th and 7th, and, although the first of its kind, the management have every reason to feel proud of the success of the show.

Farmers and horse-breeders in the Maritime Provinces have made tremendous progress in the improvement of their horse stock in the last ten years, especially in the heavier classes, and the Stock-breeders' Association should be congratulated for their enterprise in thus giving an opportunity to bring the best together, and encourage the raising of good horses.

The Clydesdales and Clydesdale grades showed the benefit that the country is reaping from the importations of the Provincial Governments which have been made within the last few years.

The strongest class was roadsters in harness, twenty-five of which circled around Judge Hillson, of Montreal, in the spacious building. Two or three good ones were driven by ladies, and received hearty cheers from the two or three thousand spectators present on Wednesday evening; and when the red ribbon was awarded Lady Sim, driven by Mrs. F. Blenkhorn, of Macan, the applause was deafening.

Pairs of roadsters in harness brought out five very worthy entries. Geo. McAvity, of St. John, showed a beautiful pair, splendidly fitted, and well handled, but, as the horses were really high-class carriage horses, and not roadsters, they did not find a place. First prize went to W. Lowe, of Amherst, on a well-matched pair of well-built horses that could step along some; second to Geo. Goldsmith, Amherst, and third to Walter C. Baker, Barronsfield.

The Standard-bred stallions were an odd, showy lot of useful road horses. King Dodds, owned by D. Dwyer, of Pictou, N. S., captured the rod, with Oakley Baron, owned by W. S. McKie, Charlottetown, second, and Maritime Prince, owned by Thos. Munro, New Glasgow, third.

Standard-bred mares were a good lot of roadsters. First went to Miss Woodburn, owned by H. R. McLean, Woodburn, N. S.; second, Bon Bon, Murray Jones, Amherst, and third to Maud Allan Wilkes, W. M. Spence, Port Elgin, N. B.

The heavy horses were probably the strongest part of the show, and the array of Clydesdales and their grades was something to gladden the heart of an admirer of good work horses. In the aged Clydesdale stallion class it was quite a task to decide which to place first, but the weight, thickness and beautifully even action of Baron Primrose, a son of the great Baron's Pride, shown by R. S. Starr, of Port Williams, won for him the honors over Logan Bros.' Handy Andy, a younger, more flashy and more rangy horse that is getting better all the time, and may yet be able to down his truly great rival. Third went to Charming Lad, owned by W. F. George, Sackville, N. B., a strong, thick-set, heavy horse that must be a useful stock-getter. Clydesdale mares were a beautiful lot of heavy work horses. Logan Bros. took first on Imported Pink Rose, and second on Imp. Soubrette, two of the very best heavy mares that ever entered a show-ring in the Maritime Provinces; third to May Lothian, shown by R. S. Snowball, of Chatham, N. B.

The younger Clydesdale stallion and mare classes brought out some really good stock, and showed that the farmers and breeders of these Provinces are alive to their possibilities in the production of horses.

Perhaps one of the mistakes of the show was that pure-bred horses were allowed to compete with the grades in the draft and agricultural classes, and, while this caused a better display, it might have done more to encourage farmers to raise and fit good horses if the grades had had these classes to themselves. There were a good many high-class draft horses shown, with fewer "weeds" than we had expected to see in the first show, and, while there were, perhaps, no really heavy-draft grade horses (1,700 pounds would hold the heaviest), still there were several good thick, rather active horses in both the heavy-draft and agricultural classes.

Special winnings for championship silver cups and diplomas were as follows: Carriage horse in harness, Banker; owner, MacAvity, St. John. Saddle horse, Guardian; owner, G. W. Fowler, Sussex, N. B. Clydesdale stallion, Baron Primrose; owner, R. S. Starr, Port Williams. Clydesdale mare, Pink Rose; owners, Logan Bros., Amherst Point. Thoroughbred stallion, Dodd; owner, Dwyer, Pictou, N. S. Standard-bred stallion, G. W. Fowler, Sussex, N. B. Hackney stallion, R. A. Snowball, Chatham, N. B. Percheron stallion, C. O. Cook, Charlottetown, P. E. I. Best Percheron mare, Chas. Symes, Minudie, N. S. Agricultural animal, any age, Fowler Bros., Amherst Point.

The annual meeting of the Quebec Pomological and Fruit-growing Society will be held at Sherbrooke on August 30th to September 1st, 1910.

### A Railway Agriculturist.

Prof. G. F. Marsh, B. S. A., formerly on the editorial staff of "The Farmer's Advocate," is now engaged as Agriculturist for the Pennsylvania Railway Company, one of the most powerful transportation corporations in the United States. From an extended report in the Geneva (N. Y.) Times, of one of his recent addresses, it appears that he is conducting an educational campaign in the form of addresses on the advantages of co-operation between farmers and railways in marketing products, and in good-roads construction. In fact, the company propose to conduct a good-roads campaign, in order that it may receive freight all the time in more uniform quantities, thus facilitating the work of distribution and avoiding glutted markets. An important part of Mr. Marsh's work will be the starting of a small demonstration fields of alfalfa at each station along the northern central section of the Pennsylvania Company's lines. At these stations meetings will also be held to discuss the advantages and methods of growing alfalfa, which it is anticipated will bring prosperity to the New York State farmers, as it has to large areas in the West. Naturally, the railway desires to operate through a prosperous country, and has arrived at the conclusion that alfalfa culture is one of the best agencies to that end.

### A Compromise Bill Re Gambling.

Contrary to expectations, there has been a compromise on the Miller anti-race-track gambling bill. Beaten in Committee of the Whole by the smallest of majorities, after a hard fight, those behind the bill at first felt like refusing anything which allowed in any form the gambling privileges they had fought against. The supporters of the bill, however, realized that they had either to continue the fight or accept a compromise, and, being beaten on a vote, were not sure that next year they would fare any better. The bill, as passed, prohibits the making of handbooks, pool-selling, the transmission of news or information as to betting or wagering, and the advertising of tips or inducements of any kind to bet or wager. Bookmaking is limited to the tracks of incorporated associations that confine their races to seven-day meets, to be held not oftener than twice a year, and during the actual progress of such race-meetings. The number of new tracks that might be opened will be reduced by the provision that bookmaking is prohibited on the tracks of any racing association hereafter incorporated, unless situated in or within three miles of a Canadian town or city of not less than 15,000 people.

Considerable has been won, but vicious gambling practices, though limited as to time and place, are still permitted.

### Reducing the Brown-tailed Moth.

Following the examinations at the Nova Scotia College of Agriculture, a party of students, under charge of Prof. Smith, planned to set out for Annapolis and Digby County to assist in the work of exterminating the brown-tailed moth. The work of destroying the nests has been proceeding since January, and has been more thoroughly done, it is said, than in any previous year. All together, between 1,200 and 1,500 nests have been picked up to a recent date, in comparison with 6,000 four years ago, thus showing the progress made in eradicating the pest. It is reported that Dr. Chas. Gordon Hewitt, Dominion Entomologist, who recently visited the Province, recognizing the national importance of keeping out of Canada this destructive moth, which it costs Massachusetts over a million dollars a year to fight, purposes recommending that the Federal Department of Agriculture join with the Local Department in the work of eradicating the brown-tail moth, and, from a general inspection of the area infected, is sanguine of at least keeping in control, if not absolutely destroying this moth.

In official circles at Washington, great interest is taken in the announcement by Premier Gouin that Quebec Province would prohibit the exportation of pulpwood cut on Crown Lands. Following so close upon the friendly trade agreement reached between the United States and Canada, some slight irritation is felt, but the action is not believed to be specially directed against the United States, but merely to be following the lead of Ontario, which, in 1897, by act, provided that all pine cut on Crown Lands should be made into lumber in Canada, and in 1900 extended the operation of the act to pulpwood cut on Crown Lands, which, since that date, must be manufactured in Canada into pulp or paper. U. S. Government officials look for an early opening of negotiations between the U. S. and Canadian Governments, with better reciprocal trade relations in view.

### Rural Telephones.

The advantages of having a telephone in the farm house are very graphically and plainly set forth in a publication just received, entitled "Canada and the Telephone." In this, by means of a series of picture-stories, the annoyance caused by having to drive long distances on an errand that might have been executed in a minute over the 'phone is shown, and the advantage of telephone connection in dozens of other critical or vexatious situations that arise on the farm, is also pictured.

For instance, here is a man with a disappointed face, who, in bad roads, has hauled a load of oats to town, and only got 35 cents per bushel for them. He did not know they were selling so low. On another page a man has left his team on the plow while he steps into the house and gets his lawyer's opinion on an important point over the wire. Every page has its picture and situation. Here a threshing gang is ordered over the 'phone, while an unfortunate has driven for miles on a similar errand, only to be disappointed. Here a farmer corrects a statement of an apple-buyer by calling up his neighbor. And so they go; the sick are inquired after; the doctor called; neighborly messages sent; machine repairs ordered; alarm of fire sent out, etc.

Of course, this is for advertising purposes, but it is instructive, nevertheless. The Canadian Independent Telephone Company, Limited, Toronto, who have got up the book, deserve credit for the effective way in which they have presented the case. In the year 1875 the telephone was invented in Canada. In the year 1910, a beautiful memorial, in commemoration of that event, is being erected at Brantford. To-day, over 450 independent telephone companies and associations are profitably serving communities, where telephone service was unobtainable from the monopoly, except at prohibitive prices. There is no doubt that competition in the business has resulted in better service. The Canadian Independent Telephone Company is supplying many local companies with all necessities, in the way of high-class telephones, switchboards, and construction material, as well as complete information how to build and equip rural-telephone lines.

There are said to be nearly 7,000,000 telephones in the United States, and less than 250,000 in Canada. It is expected that the wonderful expansion of the business in Canada of late years will continue and increase.

### Gentlemen on the Farms.

HOW TO KEEP THE BOYS AND GIRLS ON THE FARM.

I notice in "The Farmer's Advocate" of February 24th an article by Mrs. Hopkins, which I shall have to contradict to some extent. Mrs. Hopkins says the cause of the rush to the city is the rudity of the country. Such, I hope is not the case in the major part of this fair Dominion. If such be the case, why are there so many people coming direct from the city to the farms? Possibly the country folk are not so well polished as the city people, but where will you find a young farmer who puffs a cigar in the company of his lady friend, or his mother? I think you will have to look a second time before finding a more genuine-mannered people than the young folk of the farm.

Mrs. Hopkins also states that the farmer's wife is made to climb into a wagon with a basket on each arm. I do not know where such a thing would occur. I have lived nearly all my life on the farm, and have yet to see anything so inhuman, as, for my experience, every nine out of ten of the country ladies go to the city in the good buggy, and are not ashamed to do their shopping in the principal business part of the town, and very often have reason to look down on the city folk as being ignorant.

Again, as to the social part of the country, I have never had mother, sister or sweetheart brush my clothes, or shine my shoes, or pick them up after me, before or after a social gathering, since I was able to do it myself, unless on very rare occasions; and I am not the only one; in fact, I do not know of a young man in Middlesex county who has been waited on, except in times of sickness. But, instead, they are taught to wait on those of the weaker sex; while, as to courtesy, the lady who lived on a farm thirty-five years, and never had a hat touched to her, must have lived sixty miles from any place, out on a homestead, or in a lumber camp.

Please, Mr. Editor, grant room for a little more about the rude speeches which we hear from the country folk. I am inclined to think that Mrs. Hopkins did not notice the smooth talkers, but just the rough, so-called jokers. But just here, leaving all jokes aside, give the young man a good horse, and a fair share in the management, and, above all, do not expect him to ask for every cent he wants, but give him a little now and then, and I do not think there will be much trouble in keeping the young folk on the farm.

Middlesex Co., Ont. G. H.

## Farmers and Farm Boys.

Editor "The Farmer's Advocate":

We are not surprised to learn that many of our farmers and their boys were indignant, on reading Mrs. Hopkins' letter in your issue of February 24th, and felt like taking up the cudgel in their own behalf. There is good sound sense in the letter signed "The Country Forever," in your March 10th issue. Even farmers do not like to be trampled on, or misrepresented. In this Province, as a general rule, the farmer's children are well educated, well dressed, and have good manners. They have certainly no reason to be ashamed to meet the trim city folk, or feel that they are inferior to them in any respect whatever. Why should they? Does the fact that they live in the country, on a farm, in close communion with nature, tend to make them coarse, rude, selfish and discourteous? Of course, not. There are hundreds of farmers who are true, gentlemen in every sense of the word, who are industrious, kind and affectionate, who are respected by all who are acquainted with them. Very few are so lazy that they will not cheerfully lay hold of the heavy baskets and put them in the wagon when the womenfolk are going to market. No, the farmer is not half as black as Mrs. Hopkins paints him. When the young farmer comes to the city with a load of produce, what sensible person will think less of him because he is not dressed in fine broadcloth?

There are various reasons why the boys and girls leave the farm. One is because they want to make money faster, or have more to handle. Another is that their parents do not give them praise or encouragement when they do their very best. They like to have a little pocket-money to spend as they please. They do not leave the farm because their mothers are too fond of them. Oh, no; but they would be apt to do so if the conditions were reversed.

Of course, children should be properly trained in early life, but yet there are few farmers and their sons who are as selfish, overbearing and domineering as Mrs. Hopkins would have us believe. There are many noble, affectionate, conscientious sons of the soil, who would do almost anything in their power to promote the comfort and happiness of their mothers and sisters. A. R. Prince Edward Island.

At the conclusion of examinations at the Agricultural College, Truro, N. S., a cup, presented by Premier G. H. Murray for the best judging of live stock by the students of the College, was awarded to E. S. Leonard, of Paradise, Annapolis Co., who received 87 marks out of a possible 100, for the judging of horses, beef and dairy cattle, sheep and swine. Hon. Mr. Murray has always endorsed the policy of improving the live stock of the Province, hence this judging-prize cup comes fittingly from him. Forty-two students competed.

The Ontario Government Immigration Office is receiving many applications from farmers for help. Married men are asked for by many, and yearly engagements promised. Owing to the early spring, the demand has been keener than usual. Most of the requests are from Western Ontario counties.

The mineral output of Canada last year was \$90,000,000, an increase of fifty per cent. over that of five years ago, and five times that of fifteen years ago.

## GOSSIP.

Holstein breeders and dairymen generally will be interested in the advertisement in this issue of the dispersion sale to take place on Thursday, April 28th, of 100 head of pure-bred and high-grade Holsteins, the property of Alex. Bryce, at Eglinton, on Yonge street, a few miles north of Toronto, on the Metropolitan electric road.

The American Holstein Association has announced a very liberal schedule of cash and cup prizes, to be offered for Holstein cattle at thirty-two State and Provincial fairs of 1910, including the Alberta Provincial Exhibition at Calgary, to which \$100 is donated. To the National Dairy Show, at Milwaukee, Wisconsin, \$750 is the amount assigned.

Lt.-Col. R. McEwen, of Byron, Ont., near London, who last year laid the foundation of a herd of registered Aberdeen-Angus cattle, was a prominent purchaser at the joint sale of high-class representatives of the breed offered by W. Andrews and J. B. Robinson & Co., at Maryville, Mo., where Col. McEwen secured four first-class cows, three calves, and an excellent yearling bull of the Blackbird tribe. "The Farmer's Advoca-

te" congratulates Col. McEwen on his enterprise, and wishes him success in his venture in establishing a herd of this grand breed of cattle, which has made a fine record for itself, both in Britain and America.

## OTTAWA HORSE SHOW.

As advertised in this issue, the Ottawa Horse-show Association will hold its Spring Horse Show in that city on the dates May 5, 6 and 7. For prize list and all particulars, write the Secretary, R. J. Birdwhistle, 49 Metcalf street, Ottawa.

## SALE DATES CLAIMED.

April 28th.—Alex. Bryce, Eglinton, Ont.; Holsteins.  
May 3rd.—T. L. Pardo & Son, Cedar Springs, Ont.; Shorthorns.  
June 7th.—At Guelph, Harry Smith and others; Shorthorns.  
June 8th.—E. Jeffs & Son, Bond Head, Ont.; Shorthorns.

B. H. Bull & Son, Brampton, Ont., proprietors of the Brampton herd of Jersey cattle, have received from Frank E. Wilson, Caron, Sask., a letter dated

## Mrs. Hopkins Comes Back.

Editor "The Farmer's Advocate":

A few weeks ago I was guilty of an article in your paper, entitled, "Why Boys and Girls Leave the Farm," which has caused some very cutting criticism to be directed at me, accusing me of being too severe in my statements. I declare that such is not the case, and that, on the contrary, I deal with the subject very conservatively. The trouble lies in that farmers have never been told any unpleasant truths about themselves, partly because a wise policy of petting helps to keep them in their position, partly because the papers which they read depend too much on the farmers' goodwill to run any risks, and partly because, outside of their immediate circle, few and far between are those that care a rub how farmers look or feel, as long as they do the work that keeps the world going. Naturally, under the conditions, it aught but what flatters comes their way, their sensations are somewhat of a shock.

But whether or no, I maintain that to hear the plain truth occasionally does us good, and tends to our improvement; for, if we are led to believe that we are all that is desirable, what have we to strive for?

I might have been still more sweeping in that reprehensible piece, had I not refrained. I might have added that still another factor in the desertion of the farm by the boy was the fact that often he was forced out by the petty jealousy and ungenerous treatment of his father. Show me the farmer who, as long as he is able to walk, will let his boy have any lead in the management of the farm. Show me the farmer who, having graduated his son from the Agricultural College, will let him prove his knowledge in practical fashion when he returns home. Show me the farmer who treats his boy as a man and a partner, by turning over to his supervision and profit a section of the farm, or department of farm responsibility. All or any of these things would be reasonable. Why, then, are they not generally done? Because the father, in his heart, fears the new way of the boy would displace the old way, which is part of himself; because that, to be "monarch of all he surveys," as far as his line fence, is the great pride of his life. To divide authority with his son would be to impair his prerogative; and so he holds on tight-fisted to the reins of government till death comes to loosen his grip. But meanwhile, the boy, unwilling to wait for "dead men's shoes," has wandered away.

Then, I might have said, also, that the girls are drawn to the city because their innate love of daintiness and refinement makes them wish to associate with men who have, take, or make, time to groom their persons a little more liberally than most farmers manage to do. I have put my hand, and am doing it still, to all the phases of farm work, and I know exactly what the result of some of it can mean to the cleanliness of body and clothes. Yet, it is really no excuse for the untidy appearance that the farmer presents, at least when away from his work.

I have a foretaste of the anathemas that will descend on my audacious head, but the say will out, for, too often in a crowd of farmers at auction or market, have I worried over this fact of their carelessness of attire and person, which makes their individuality so uninviting and unlovely, and tends to lower the nobility of their calling in the consideration of all those with whom they come in contact.

March 21st, 1910, in which he writes: "I wish to convey to you an appreciation of the pains you have taken in the selecting of foundation for a dairy herd. The cows are a splendid lot, and have every indication of being the herd that make good. The bull you sent me is much admired for his solid color and handsome appearance. This shipment attracted much attention in this district, where good dairy cattle are conspicuous by their absence. I am feeding them well, and will have them in good condition for calving."

## THE PARDO SHORTHORN SALE.

The dispersion sale on May 3rd of the entire herd of 31 registered Shorthorn cattle, property of T. L. Pardo & Son, of Cedar Springs, Kent Co., Ont., should attract the attention of breeders and farmers generally. The herd has been carefully selected and bred, comprising several imported animals, and others bred from imported sire and dam of favorite Scotch families, some of good-milking strains. The bull at head of herd is the red four-year-old, Spring Valley Chancellor, a Toronto grower, and a son of the high-class sire, Imp. Bapton Chancellor, of Marlborough.

I know that there are exceptions innumerable—God pity country life if it were not so—men who do know the use of tooth-brush and nail-file, and who take a bath oftener than once in six months. But I am not talking to the exceptions; I am talking to the generality, which is the rule, and that, I can vouch by a lifetime's observation, can stand for strong talk in that respect. Carleton Co., Ont. MRS. W. E. HOPKINS.

## Mixed-farming Profits.

H. J. Shultz, an Illinois farmer, who has been keeping accounts, and a daily record of his farming operations for ten years, so that he knows just what he is doing, gives Wallace's Farmer the results, financially, from his 243 acres in 1909. His only purchases were some corn and other grain feed for cows. His sales were as follows:

Thirty-three cows, milk and calves	\$4,524.93
Hogs	1,346.32
Forty-five acres of wheat	1,208.85
Sheep, wool, and lambs	574.98
Team of horses	350.00
Five cows and heifers	300.00
Chickens	60.38
Eggs	132.61
Potatoes	28.10
Hauling gravel	62.33
Various little things	28.70
<b>Total sales</b>	<b>\$8,617.20</b>
<b>Paid out:</b>	
For cow feed	\$1,756.97
For hog feed	171.20
For slop	200.00
For labor	627.55
<b>Total</b>	<b>\$2,755.72</b>

This leaves a balance sold from farm of \$5,861.48. In the statement for labor, he did not include threshing, hire of engine, filling silo or any labor such as painting, laying tile, carpenter work, or any improvements—simply money paid for farm work to run the farm. In 1908 his sales amounted to \$7,030.50.

## Animals that Will be Missed.

Editor "The Farmer's Advocate":

In one of your March issues appeared a letter from Prof. W. Lochhead, of Macdonald College, P. Q. Your many readers will be pleased to have noticed the interest that has been taken in the passenger pigeon, to prevent its extinction. As the farming community are more in touch with the native birds and animals than any other calling, it is to be hoped they will lend every assistance to those gentlemen who have offered so liberal a reward for the protection of one of our handsomest birds. But a very few decades ago they were so numerous, their extinction was not thought of. And should some means not be found by which some of our native fur-bearing animals can be protected, there can be no doubt they must soon share the same fate. It is well known some of the animals alluded to are a nuisance around the poultry house, but, for all that, when they have disappeared, they will be much missed, excepting, probably, the bear and wolf. Quebec. SUBSCRIBER.

22nd (imp.). Among the females are representatives of the favorite Roan Lady, Lady Dorothy, and other well-known tribes of good repute. The terms of the sale are easy. Electric cars connect with all M. C. R. and P. M. trains, and will be met at Cedar Springs.

J. Watt & Son, Salem, Ont., write: We have recently sold the following Shorthorns: To John S. Scott, Belgrave, Ont., a very promising yearling bull, by Imp. Pride of Scotland, and out of Imp. Duchess 42nd, bred by the Duke of Richmond and Gordon. We were fitting this bull for the fall shows, and we predict he will be heard from, since going into Mr. Scott's hands. To John Barber, Salem, Ont., a very good English Lady heifer. Mr. Barber intends to keep a few good Shorthorns, and bought this heifer for a foundation. We have one good red 16-months-old bull left, by Imp. Ramsden of Scotland, and out of a Miss Ramsden dam, from imported sire and dam. This bull is good enough to use in any herd, and will be priced cheap, as he is the last one we have. We have the youngest and most uniform lot of calves this winter by Imp. Pride of Scotland, we have had for a good many years.

**Drawing Out Money**

from the Traders Bank is just as simple and easy as putting it in.

Fill out a Cheque, as illustrated, payable to yourself, present it with your Pass-Book, and you get, without delay or formality of any kind, as much money as you want, up to your total balance.

But you cannot have a balance to draw on unless you first put it in. Why not deposit some now.

**THE TRADERS BANK OF CANADA**

Over 100 Branches in Canada

**MARKETS.**

**Toronto.**  
LIVE STOCK.

On the best market ever held at West Toronto, receipts numbered on Monday, April 18th, 110 cars, comprising 2,406 cattle, 14 hogs, 41 sheep, 146 calves. Quality of cattle good; trade brisk; prices 20 cents to 30 cents per cwt. higher. Prime picked butchers', \$7.25 to \$7.50; loads of good, \$7 to \$7.25; medium to good, \$6.75 to \$7; medium, \$6.25 to \$6.50; common, \$5.50 to \$6.00; cows, \$5.00 to \$6.00; milkers, \$4 to \$5.50 each; calves, \$4 to \$9 per cwt. Sheep—Ewes, \$6 to \$7.25; yearlings, \$8.50 to \$9.25; spring lambs, \$5 to \$10 each. Hogs—Dealers report them lower, at \$9.25 to \$9.35, fed and watered; \$9 to \$9.10, f. o. b. cars, country points.

REVIEW OF LAST WEEK'S MARKET.

Receipts of live stock at the City and Union Stock-yards were again less than for the previous week. The quality was fair to good, with prices firmer, especially for the medium-light cattle.

The total receipts for the week were as follows:

	City.	Union.	Total.
Cars	138	135	273
Cattle	2,101	2,417	4,518
Hogs	3,332	1,278	4,610
Sheep	235	42	277
Calves	445	143	588
Horses	2	78	80

The total receipts for the corresponding week of 1909 were:

	City.	Union.	Total.
Cars	190	64	254
Cattle	2,670	928	3,598
Hogs	4,322	842	5,164
Sheep	339	145	484
Calves	701	174	875
Horses	1	162	163

The figures show a total increase of 920 cattle, but they also show decreases of 554 hogs, 207 sheep, 287 calves, and 83 horses, in comparison with the same week of 1909.

Exporters.—Export steers sold from \$6 to \$7.50; export heifers, \$6.30 to \$7.25; export bulls, \$5 to \$5.75.  
Butchers'.—Prime picked lots sold at \$6.75 to \$7; loads of good, \$6.50 to \$6.75; medium, \$5.90 to \$6.25; common, \$5 to \$5.80; cows, \$4 to \$5.50; canners, \$2 to \$3.

Feeders and Stockers.—Short-keep feeders, 1,000 to 1,100 lbs., sold at \$6 to \$6.65; feeders, 900 to 1,000 lbs., \$5 to \$5.75; stockers, \$4 to \$4.75.

Milkers and Springers.—Receipts of milkers and springers were equal to the demand. Prices steady, at \$35 to \$65, with one or two choice cows at \$70 each.

Veal Calves.—Receipts moderately large. Demand good, but prices a little easier, at \$3 to \$8 per cwt.

Sheep and Lambs.—Receipts light, with prices about steady. Ewes, \$5.50 to \$6.25; rams, \$4.50 to \$5; yearling lambs, \$7.50 to \$8.50, and \$9 for good quality.

Hogs.—Receipts light, but prices were lower than last week, selling at \$9.40 to \$9.50 for selects, fed and watered, and \$9.15 to \$9.25, f. o. b. cars at country points.

Horses.—Trade in horses was not quite as large at the Union Horse Exchange as in our last report, but prices remained firm at last quotations. J. Herbert Smith, manager, reports having sold four carloads to the Northwest dealers, as well as many minor shipments to local points in Ontario. There was also a fair city trade. Prices were as follows: Drafters, \$180 to \$225; general-purpose horses, \$160 to \$200; expressers and wagon horses, \$140 to \$225; drivers, \$100 to \$250; serviceably sound, \$35 to \$80.

BREADSTUFFS.

Wheat.—No. 2 white, \$1.08; No. 2 mixed, \$1.07. Manitoba wheat—No. 1 northern, \$1.13; No. 2 northern, \$1.10, track, lake ports. Rye—No. 2, 68c. to 69c., outside. Peas—No. 2, 75c. to 76c., outside. Buckwheat—No. 2, 51c., outside. Barley—No. 2, 52c. to 53c.; No. 3X, 51c.; No. 3, 49c. Corn—American, No. 2 yellow, 71c.; new No. 2 yellow, 67c.; Canadian corn, 64c. to 65c. Oats—No. 2, 39c., at points outside. Flour—Ontario 90 per cent. patents, \$4.10 to \$4.15, in buyers' sacks, outside. Manitoba first patents, \$5.70; second patents, \$5.20; strong bakers', \$5.

HAY AND MILLFEED.

Hay.—Baled, in car lots, at Toronto, No. 1, \$15 to \$15.50; No. 2, \$14 to \$14.50.

Straw.—Baled, in car lots, at Toronto, \$7.50 to \$8.

Bran.—Car lots, in sacks, at Toronto, \$22 to \$22.50 per ton; shorts, \$1 more.

HIDES AND WOOL.

E. T. Carter & Co., 85 East Front street, have been paying the following prices: No. 1 inspected steers and cows, 11c.; No. 2 inspected steers and cows, 10c.; No. 3 inspected steers, cows and bulls, 9c.; country hides, 9c. to 10c.; calf skins, 13c. to 15c.; horse hides, No. 1, \$3.00; horse hair, per lb., 32c.; tallow, per lb., 5c. to 6c.; wool and raw-fur prices given on request.

COUNTRY PRODUCE.

In country produce, the same conditions and prices prevailed.

Receipts of choice butter continue to be light, with prices quite firm. Creamery pound rolls, 29c. to 32c.; creamery solids, 27c. to 28c.; separator dairy, 27c. to 28c.; store lots, 22c. to 23c.

Eggs.—Receipts large, with prices firm, on account of dealers having commenced to put them in cold storage. Case lots are quoted at 21c.

Honey.—Extracted, 10c.; combs, per dozen sections, \$2.25 to \$3.

Beans.—Market steady. Hand-picked, \$2.15 to \$2.25; primes, \$2 to \$2.10.

Cheese.—Market steady; prices unchanged; large, 13c.; twins, 13c.

Poultry.—Choice lots of poultry are scarce. Turkeys, 18c. to 24c.; chickens, last year's birds, 20c. to 23c. per lb.; fowl, 15c. to 16c. for good hens.

Potatoes.—Plentiful supplies have caused lower quotations. Car lots of Ontario potatoes, on track, Toronto, range from 35c. to 40c., New Brunswick Delawares, 40c. to 45c.

FRUITS AND VEGETABLES.

Apples are plentiful and cheaper, selling from \$1 to \$2.50 per barrel, a few Spies

bring \$3. Onions, per bag, \$1.25 to \$1.35; carrots, per bag, 40c. to 50c.; parsnips, per bag, 50c. to 60c.; beets, per bag, 65c.; cabbage, per barrel, \$1.25 to \$1.50; turnips, per ton, \$6.

Montreal.

Live Stock.—The local cattle market showed extraordinary strength last week, with advances in prices taking place from time to time. Sales of some very fine stock were made as high as 7c. per lb., choice quality ranging from 6c. up, fine from 6c. to 6c., good from 5c. to 6c., medium from 4c. to 5c., and common from 4c. to 4c. Some very choice bulls sold at 5c. to 6c. per lb. Calves sold from \$2 to \$5 each, while lambs were all taken up at \$4 to \$10 each, demand being good. Sheep were in good demand, also, and the price ranged around 6c. per lb. The only weak feature of the market was in connection with hogs, these having declined. Prices steady, apparently, at from 10c. to 10c. per lb., off cars, a few very choice having possibly brought 10c.

Horses.—Dealers reported a dull market last week. On the whole, trade was as good as could be expected for the season of the year. Heavy draft horses, 1,500 to 1,700 lbs., sold for \$250 to \$325 each; light draft horses, 1,400 to 1,500 lbs., \$200 to \$250 each; light horses, weighing 1,000 to 1,100 lbs., \$100 to \$175; inferior, broken-down animals, \$50 to \$100 each, and choice saddle or carriage horses, \$350 to \$500 each.

Potatoes.—Market for potatoes stronger, and prices a fraction higher than the previous week. Green Mountain potatoes cost 40c. per 90 lbs., carloads, track, Montreal. These sold to the trade at 45c. Cheaper grades of stock could be had 5c. less.

Apples.—Merchants quote No. 2 Spies at \$2 to \$2.50 per barrel, and No. 3 at \$1.75 to \$2.10; Ben Davis and Baldwins, No. 2, at \$1.75 to \$2, and No. 3, at \$1.50 to \$1.60 per barrel. These are auction prices.

Eggs.—Advanced last week. Prices had not gone below 20c., and the advance was believed to be due to some merchants having begun to pack. Prices in the country, 19c. to 19c., and to grocers here, 21c. and 22c., an advance of about one cent all round. By Monday, 18th, they had eased off a little, selling for 21c. for best.

Butter.—Market strong. During the week, prices advanced about one cent per pound. Stocks light, particularly of fresh-made butter, which sold at 30c. to 31c. per lb., while some fall creamery sold at 28c. to 29c. Dairies and rolls scarce also, the latter being up to 24c. and 25c. per lb.

Grain.—Oats stronger; prices advanced about a cent. No. 2 Canadian Western, carloads, store, at 42c. to 42c. per bushel; No. 3 at 41c. to 41c.; No. 2 white Ontario 40c.; No. 3 white 39c., and No. 4 38c. No. 3 barley 60c.; No. 4 58c., and feed barley 56c. per bushel.

Flour.—Market unchanged, at \$5.80 per barrel for Manitoba first patents; \$5.36 for seconds, and \$5.10 for strong bakers'; Ontario winter wheat patents, \$5.50 to \$5.60; straight rollers, \$5.10 to \$5.25.

Feed.—Bran, \$22 to \$22.50 per ton, in bags, for Ontarios; \$23.50 to \$24 for Ontario middlings; \$20 to \$21 for Manitoba bran, and \$22 to \$23 for shorts. Pure grain mouille, \$32 to \$33, and mixed, \$25 to \$28. Cotton-seed meal, \$35 to \$40.

Hay.—No. 1 hay, \$15 to \$15.50 per ton; No. 2 extra, \$14 to \$14.50; No. 2, \$12.50 to \$13; clover mixed, \$11.50 to \$12, and clover, \$10.50 to \$11.50.

Seeds.—Demand excellent; prices a fraction lower on red clover and alsike, at \$17.50 to \$19 for the former, and \$13 to \$17 for the latter. Timothy seed firmer, at \$5.25 to \$7.25 per 100 lbs. Alfalfa at 23c. to 25c. per lb.

Hides.—A rise of 1c. in calf skins; prices 14c. and 16c. per lb., for Nos. 2 and 1, respectively. Beef hides, 10c. per lb., uninspected, and 10c., 11c. and 12c. per lb., respectively, for Nos. 3, 2 and 1. Sheep skins, \$1 and \$1.25 each, and lamb skins, 10c. each. Horse hides steady, at \$1.75 each for No. 2, and \$2.50 for No. 1. Tallow, 1c. to 5c. per lb. for rough, and 5c. to 6c. per lb. for rendered.

Chicago.

Cattle.—Steers, \$6.25 to \$8.65; cows, \$4.85 to \$7.25; heifers, \$4.25 to \$7.50; bulls, \$4.50 to \$6.50; calves, \$3 to \$8; stockers and feeders, \$4.75 to \$6.85.

Hogs.—Choice heavy, \$9.95 to \$10; butchers', \$9.95 to \$10.05; light mixed, \$9 to \$9.95; choice light, \$10 to \$10.10; packing, \$9.90 to \$10; pigs, \$9.90 to \$10; bulk of sales, \$9.90 to \$10.

Sheep and Lambs.—Sheep, \$6.50 to \$8.25; lambs, \$7.75 to \$9.75; yearlings, \$7.65 to \$8.65.

Buffalo.

Cattle.—Prime steers, \$8 to \$8.65. Veals, \$6 to \$9.75.

Hogs.—Heavy, \$10.25 to \$10.30; mixed, \$10.25 to \$10.35; Yorkers and pigs, \$10.25 to \$10.30; roughs, \$9.25 to \$9.40; dairies, \$10.15 to \$10.25.

Sheep and Lambs.—Lambs, \$7.25 to \$9.65; yearlings, \$6.25 to \$8.50; wethers, \$7.75 to \$8; ewes, \$7 to \$7.25; sheep, mixed, \$4 to \$7.50.

British Cattle Markets.

London and Liverpool cables quote live cattle (American) at 14c. to 15c., dressed weight; refrigerator beef, 11c. to 14c. per pound.

Cheese Markets.

Belleville, Ont., 12 3-16c. St. Hyacinthe, Que., butter, 29c. to 30c. Chicago, Ill., butter, creameries, 26c. to 32c.; dairies, 22c. to 28c.

TRADE TOPICS.

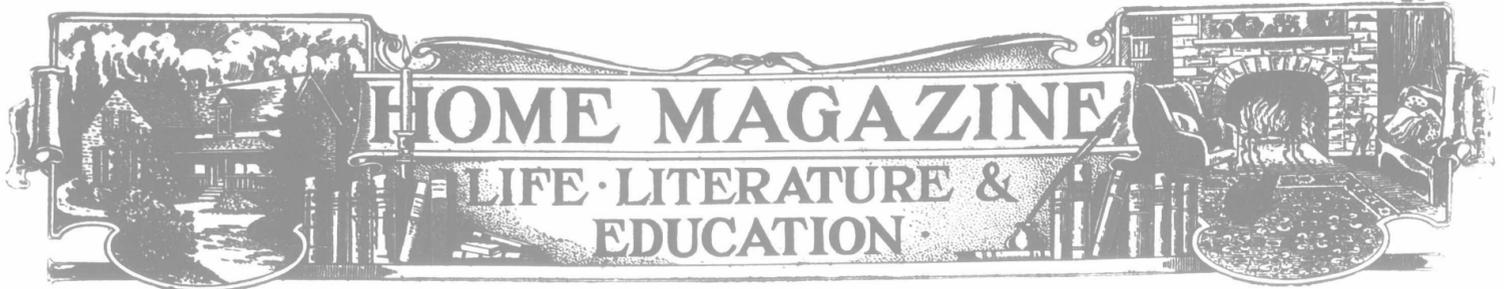
Buildings and human lives have long been the subject for insurance, and farm animals have come in for special attention in a class by themselves. "The General Animals Insurance Company," whose Western Ontario manager is Jas. J. Reesor, 25 Toronto street, Toronto, Ontario, is in this line of insurance, and is making itself known as an energetic and successful institution. Considerable credit for the company's prosperity in Ontario is, no doubt, due to the local manager, who is a lover of animals, and well posted on their history and condition in the Province.

A PIONEER IN THE ROOFING BUSINESS.—Among the pioneers in the roofing business is the Brantford Roofing Company, Limited, whose energies are devoted exclusively to the manufacture of asphalt roofings. They claim that the asphalt used in their factory is of an exceptionally high grade, having been refined until it is 99 per cent. pure. The felt is not the ordinary commercial felt, but is made of long-fibred wool. It is first saturated with asphalt, and then given a heavy coat of the same material, to which has been added crushed feldspar, asbestos fibre, mica, etc., making it completely fire and water proof. Nine different styles of roofing are made, besides two thicknesses of saturated felt for sheathing, or interior surfacing. For the latter is claimed weather, acid, gas and fire resisting qualities. Their advertisement appears regularly in "The Farmer's Advocate."

Now is the time to look over the harvest equipment, find out what one needs, and select the machine which, in his judgment, will be best adapted for his work.

This is a subject that calls for careful consideration. Every delay due to a breakdown, every moment lost by a bungling machine at harvest time, means a reduction of profits.

The International Harvester Company, who manufacture the Deering and McCormick machines, claim that the I. H. C. trade-mark is a guarantee of quality—a seal of excellence; that they have a particularly good record on Canadian farms. This company manufactures, not only harvesting and haying machinery, but everything needed for seeding or cultivating operations, as well as binder twine, gasoline engines, cream separators, hay presses, wagons, sleighs, and manure spreaders. See the local I. H. C. dealer, or write direct to nearest branch house.



**Men of To-day.**



**A. J. Balfour.**

Leader of the Opposition in Britain's political struggle.

The question, "Does money carry disease?" has been resurrected recently in an article by Mr. A. Cressy Morrison in *Popular Science Monthly*. There seems no reason whatever to doubt that it does; the microscope has before this proven that the old stigma "filthy lucre" is at least literally true. . . . And now the race waits for the benefactor who will devise some means of keeping "the indispensable" properly disinfected.

A few weeks ago a grand jury in Jersey City indicted the officials of the Beef Trust individually on the charge of conspiring to raise the prices of food. New Jersey is known as the "Home of Trusts," and nearly all of those concerned hold charters granted by that State. In addition to the National Packing Company, the indictment names, among others, the well-known Swift & Co., Morris & Co., Hammond Packing Co., Ogden Armour, A. Watson Armour, Edw. Morris, Louis Swift and Edward Swift. In the Poultry Trust, which was also recently indicted in New York for violation of the anti-trust law of the State, there are eighty-seven defendants.

According to the *New York Sun*, witnesses have been brought to show that "Three or four times a week the cold-storage people (who have been made to serve well the trusts) received schedules of prices, and were expected to act according to the instructions which these schedules contained. Those who complied with the lists were known as 'good managers,' and those who failed to do so went under the head of 'bad managers.'" . . . The prosecution is also said to be considering pleas for other indictments, on the ground that the public health is being impaired by the consumption of foods kept too long in cold storage.

Mr. William Lyon Mackenzie King is steadily proving himself a chip of the old block. Seventy-seven years ago the grandfather, William Lyon Mackenzie, made his famous attack on the "greatest combine in the Province," the "Family Combination," which kept the biggest

plums of power and office and emolument in the hands of the favored few. Last week the grandson introduced into Parliament a bill seeking to prevent the illegal operation of combines of the modern fashion, combines that tend to make it harder, year by year, for the poor man to live comfortably, while the extras demanded from him go to make the few within the magic circle unreasonably and unnecessarily wealthy. Canada is not yet vastly in the power of the trusts, and the movement is timely.

Ireland is probably one of the most misunderstood and misrepresented countries under the sun. Irish history has been difficult to interpret and write, because the invading people employed such drastic methods to extirpate the very memory and records of a civilization, learning, commerce and industry that went down in ruthless catastrophe, the outcome of what was called a "godly conquest," by conquerors whose real purpose was to exploit the splendid resources of that once peaceful and prosperous land to their own ambition and gain. She has suffered and is suffering still from false and perverted history, political and economical, and the re-writing of it is one of the duties of the 20th century. This, in substance, is the purpose of a notable book, published last year by the Macmillan Company, entitled, "The Making of Ireland and Its Undoing," by Alice Stafford Green. It deals mainly with the period from the year 1200 to 1600, and to say that it affords the reader a vivid revelation is to put it mildly. The appearance of the volume is timely this year, when from America a great "Home to Ireland" excursion crusade is being inaugurated. It is a book that every student of British history and every lover of Ireland should read, for it will do much to re-inspire with confidence and hope those who hail with delight the re-drawing of still brighter days for the Emerald Isle. By sympathy, knowledge and experience the authoress was well qualified for her work, and what she has done will stimulate and lead the way for a more general and painstaking delving into Irish records, thus adding lustre instead of the traditional policy of besmirching the name of the country.

**New Forces in Old China.**

(By Scholasticus.)  
(Concluded.)

In the examination papers set for candidates desirous of obtaining the Chu Jen, or the equivalent—that is, to our M. A. degree—this marvellous new force of education, is very clearly shown by the contrast, the extraordinary contrast, which is shown to the ancient system of education which I have briefly sketched. Questions were asked at this examination like the following: "What improvements are to be derived from the study of foreign agriculture, commerce and postal systems? What are the chief ideas underlying Austrian and German prosperity? How do foreigners regulate the press, post office, commerce, railways, banks, bank-notes, commercial schools, taxation, and how do they get faithful men?" Then, further questions were asked, as: "Explain free trade and protection; define the relations of land, labor and capital; which Western nations have shown the most attention to education, and what is

the result? What is the bearing of the Congress of Vienna, the Treaty of Berlin, and the Monroe Doctrine, on the Far East?" There are many more questions which could be quoted, all going to show not only the extraordinary contrast with the ancient system, but also a thorough and clever grasp of the essentials of Western civilization, progress and culture. The new educational plan is to have a university in the capital of each Province, with auxiliary prefectural and district colleges and schools, the whole system to culminate in the Imperial University of Peking. In all these institutions Western arts and sciences are to be taught, but side by side with the old Confucian classics, and the inclusion of these antiquated studies is, of course, the weak part of the whole scheme. Pupils and teachers will be required to perform the prescribed ceremonies to the great sage. This regulation is a bar to all Christian students, although, by a special stipulation, Christian teachers are not required to take part in Confucian worship. It looks, therefore, as if the objects of this great change were only to introduce Western methods and education in order to increase the prosperity of China, and enable her to compete on equal terms in trade and commerce with foreign nations. The originators of the altered state of affairs, notwithstanding their great and clear understanding of many things essential to a nation's progress, have entirely overlooked the basic principle of all, that, without Christianity, it is impossible to produce in China a better type of men than their ancient system has produced. Without this they cannot inspire men with high ideals of life, and incite them to noble purposes and loftier desires. Fortunately, this aspect of the question is fully understood by our missionaries, and earnest and brave endeavors are being made, attended by great success, to combat it by the foundation of more schools, colleges and universities belonging to Christian denominations. On this educational question there is another new force to be noted, in that China is now sending students to all countries of the world. We have them in Canada; they go to the States, to Great Britain, to Germany, to Japan. Mark the change: A few decades ago, ambitious Chinese youth who had sought an education abroad, were imprisoned on their return to their native land. Not only do these youths go to the various universities, but frequently they have headed the classes in their respective subjects. Nor is this movement confined to students, for deputations appointed by the Chinese Government have visited foreign countries, in order to study special subjects. Canada has already received one such deputation. In view, therefore, of this, and the stiff questions which I have quoted as being set, it surely can be said that the Chinese have amply vindicated the saying of their Emperor, "We do not lack either men of intellect or brilliant talents, capable of learning or doing anything they please."

Another new force in old China is the influence which Japan has upon her, and which she is seeking by every possible means to extend. The success of Japan's army and navy has not been without its lessons to China, and, without entering into any details, it can be said that she has set about preparing both military and naval forces, which will one day

be a power—a more formidable power, most likely, to be reckoned with than even that of Japan. It is reported that China's army may one day number thirty million men. For comparison, we may take Germany's, which now consists of some four million. The great Napoleon said, "When China is moved, it will change the face of the globe." There is very little doubt that Japan fully recognizes this, and is endeavoring, by inculcating her methods, to attach the stupendous latent forces of China to herself. Japan's marvellous entrance into the markets of the world is a still further incentive to China, and is creating a new force which in time will not only be felt in that country, but throughout the world. The marvellous inventions of the last century—the telegraphs, the steamships, the telephone, the railways—have already been new forces in China, and are gradually permeating the whole national life. Newspapers are adding new forces. Within the last three or four years, four hundred periodicals have been established, and two hundred daily papers are now coming out in the different cities, some of these even getting the news of the word from the Associated Press. Of European books the demand is enormous. There is no space to do more than refer to the new force evincing itself in the new constitution of China. Only a week or so ago, the meetings of the elected Provincial Assemblies marked the first stage in the actual establishment of representative institutions. These bodies are advisory, rather than legislative, and their immediate purpose is to serve mainly as training schools for the Imperial Chinese Parliament, which is to be brought into existence in about eight years. Next year a census is to be taken, and the Provincial Assemblies will receive power to draw up their own budgets. Various other changes will take place, and institutions formed, until, by 1917, there will be Upper and Lower Houses of Parliament for the whole Empire, with certain safeguards for the absolute authority of the Sovereign in foreign relations and national defence. Even in Canada the effect of this movement is felt, as Dr. Kung, the Chinese Consul—and please notice that the appointment of a Chinese Consul to Canada clearly marks the effect of new forces at work—says that a census will be taken of the Chinese in Canada next year, and they will be entitled to representatives in the Provincial Councils. Quite apart from the new forces which these representative institutions will most surely bring to bear upon the character of the Chinese, reforms will be made, and what these will be may be judged of by those which the young, enlightened, and be it said with sorrow, murdered Emperor tried to bring about, such as the adoption of Western art, science, agriculture, arms and drill, patent and copyright laws, a bureau of mines and railroads, improved mail service, and so on. Does not all this show the new forces which are at work in a population which, not so very many years ago, tore up the rails laid, and the locomotives brought in by "foreign devils," and threw them into the sea? It must be borne in mind, too, that the introduction of the new school system is primarily aimed at enabling the people to read and write before they are called upon to exercise the right and the privilege—so lightly esteemed, unfortunately, by many European

and other nations—of voting at the first national election, to be held some years hence. Even that cherished and curious adornment, the pig-tail, is doomed. By a recent order of the Prince Regent, it is to be done away with throughout the whole Empire. Again, officials at Court receptions are in future to appear in European clothes. After studying the question for two years, the metric system and standards are to replace the chaotic system of China. The standards have already been given to Chinese officials from the Bureau of Metrical Weights and Measures, at the Pavilion de Breteuil, near Sevres. The Chinese rejected the British system.

That the Chinese are capable of making not only social, commercial and political reforms, but also moral ones, is proved most conclusively by the wise, determined and patriotic steps which they have taken to put a stop to the traffic in opium. This movement has been called "the greatest moral reform of the twentieth century," and is one to which it is impossible to give too large a measure of praise. It speaks well for the moral fibre of the Chinese, a characteristic of theirs which we are apt to overlook, owing, it may be, in a great measure, to those misunderstood lines of Bret Harte's, which are continually in our ears:

"For ways that are dark,  
And for tricks that are vain,  
The heathen Chinese is peculiar."

These lines, I should like to say, are regarded by competent judges as being a slur, not upon the Chinese, but upon Americans, as the tenor of Bret Harte's whole poem is to satirize how completely the heathen Chinese could beat the American at his own game. And whilst mentioning this, it may be said that even yet few of us appreciate the keenness of the Chinese intellect, which beats that even of the Jews, who, in their turn, in some instances, at least, have surpassed the British, the German, the Austrian, and the Russian. I must not digress further on this, and, as to the opium question, I will only add a quotation from the speech of the Chinese delegate at the recent Opium Conference at Shanghai, in order to show you the spirit in which China approached the subject, the noble spirit, therefore, which is to be found among the Chinese, and which some of us may be inclined to regard as a new force, though, of course, it is not. This delegate said: "I would not have you, Sir, think that China comes to this conference in a spirit of impotence, crying to the world to rid her of a foe with which she had not the moral strength or courage to do battle. We understand the enormous difficulties; we have counted the cost; we are determined to rid ourselves of this curse."

Our Magna Charta has been practically adopted by the Chinese; the right of public assembly has been assured, and there will be no taxation, except by law. Freedom of the press has been provided for. The most important of all the new forces is one upon which I need not dwell, as attention has been drawn to it so frequently, the foundation, in the near future, of a Chinese National Church. Conferences have already been held at Shanghai to consider the constitution and canons of a General Synod, and another one is to take place in 1912, when it is hoped that matters will have so far advanced that a Chinese National Church will then be established, based on the Holy Catholic Church, but with individual Chinese characteristics. There are many other new forces which should be mentioned, but it is impossible to do so inside the limits of a newspaper article, and, I should say, to do proper justice to those with which I have very briefly dealt.

In conclusion, let me add that the great moral which I venture to think we should all draw from a consideration, however brief, of the New Forces in Old China, is "Faith." Faith in

our God, faith in His eternal purpose, faith in His eternal power, faith in His eternal love, faith drawn from the indisputable fact that His gospel is the most powerful moral lever ever applied to the affairs of men, and faith, therefore, that in course of time China will be Christianized. It will take time, but we must remember that it took three hundred years to Christianize England. I have referred to the peaceful manner in what is really a marvellous revolution has taken place in China. This affords us great encouragement. And the cause of this quietness may be found in the manner in which the Chinese regard human society. They place the scholar first, the farmer second, the mechanic third, the tradesman fourth, and last, and lowest of all, the soldier, who is regarded as a necessary evil. Sir Robert Hart, that great man who has done so much for the Chinese, and who so thoroughly understands them, believes and declares that when the country has developed its armed forces to the highest extent, so greatly do the Chinese love peace, these forces will be used, not for war, not for self-aggrandizement, but for the peace of the world. She will be so strong that the mere threat of her opposing any nation seeking to disturb peace will be sufficient to make war impossible. This is a noble view, as set forth by Sir Robert Hart, a lofty ambition, worthy of a great nation, and it surely encourages us to believe that the Yellow Peril is really the golden opportunity of Christendom, to have faith that in time China will be Christianized, and its huge, progressive, clever and peaceful population gladly become the subjects of the Prince of Peace.

## Hope's Quiet Hour.

### The "Unpardonable Sin."

Editor "Hope's Quiet Hour":

I have been an interested reader of your page for a long time, and think it is grand. Whenever "The Farmer's Advocate" comes to the house, that is the first thing I look for. I feel that there is a lot of help in it for anyone who feels inclined to read it. Now, if I am not intruding too much on your good nature, would you kindly explain the unpardonable sin, mentioned in Mark iii: 29. Also would you give me your opinion, is there such a thing as sinning away a person's day of grace? Is there any passage in the Bible concerning it?

AN INTERESTED READER.

I am sorry to have been so slow about replying to this letter—but it is not an easy one to answer satisfactorily, and I have put off the difficult duty for several weeks. Other passages in the Bible about the "unpardonable sin" are: S. Matt. xii: 31, 32; Heb. vi: 4-8; x: 26-31, and 1 S. John, v: 16.

It is a hard question—who can answer it? But the Bible is crowded with promises of God's full and free forgiveness offered to penitent sinners. So one thing is certain—anyone who is afraid that he has committed the unpardonable sin, is very evidently not hardening his heart against the Holy Spirit's influence. Those who are really "blaspheming against the Holy Ghost" will not be troubled about their spiritual condition, but will be utterly reckless and indifferent, having—as the Apostle says—their conscience seared with a hot iron. Bishop Ingram answers a similar question to the one in the above letter in these words:

"People sometimes imagine they have committed the sin against the Holy Ghost, and are in a state of despair. But the 'sin unto death' is saying, 'Evil be thou my good.' While a soul says that, God cannot turn it. So long as you are in a state of really loving evil and choosing it, and lying down in it, you are in a state of living death. If any one of you is afraid that he has sinned against the Holy Ghost, and is in an anxious state about it, that very state of anxiety shows he has not committed it; if he had, he would not mind."

Some things are kept hidden by God. When curious questioners asked our Master: "Are there few that be saved?" He answered by a warning to look to themselves—"Strive to enter in at the strait gate," He said, and that word "strive" is a very strong word, implying intensest struggling. We can safely trust the God of LOVE to "throw His arms around every soul" and use every possible means of bringing His own children home to Himself. Our business is not to be too curious about the judgment—which is in the best possible hands—but rather to see to it that we ourselves are not slowly hardening our hearts by allowing the cares and pleasures of everyday life in the world to crowd out the remembrance of the great invisible realities. What profit is it to make haste to rise up early and so late take rest and eat the bread of carefulness—as the Psalmist says—if we are not at the same time laying up the eternal riches of character. Death will surely come, and—if we have been toiling only for earthly prosperity—he will rob us of everything. The longer we live for this world, the harder it becomes to remember the invisible God. It may be harder to turn from evil to good, after the mystery of death is passed, than it is in this world—it is recklessly foolish, as well as wrong, to refuse God's offer of pardon and strengthening grace. We never know when it may become useless for His Spirit to strive with us. The more He multiplied His miracles to bring Pharaoh to repentance the harder his heart grew. It is always so if we reject and despise spiritual privileges—they only make us worse. I think the answer to "An Interested Reader's" second question is contained in Heb. x: 26-31; vi: 4-8. "But, beloved, we are persuaded better things of you, and things that accompany salvation, though we thus speak"—so says the writer of the Epistle to the Hebrews (vi: 9), winding up his terrible descrip-

tion of those who "fall away" after having been once enlightened. God's love is eternal and infinite. Can He ever give up loving a soul that He has made? If punishment will bring us out of the darkness of sin into the light of holiness, then He loves us too deeply to let us escape punishment. We can always depend on the LOVE of GOD—and His love is not weak and indulgent, but strong and merciful enough to cut out the cancer of sin even at the cost of agony to the sinner and to the Saviour Himself.

HOPE.

Editor "The Quiet Hour":

I am sending you a piece I wrote some time ago, entitled "Coming to Christ in Youth," hoping to see it in your Quiet Hour page. I remain, yours truly,

CHESTER FEATHERSTON.

### Coming to Christ in Youth.

There is one passage of Scripture that should appeal to the minds of the young. We read in the Book of Books, these words: "Remember now thy Creator in the days of thy youth while the evil days come not, nor the years draw nigh, when thou sayest I have no pleasure therein."

Our Saviour says, "They that seek Me early shall find Me." The Lord wants us to come to Him in youth, because we can devote our entire lives to his service. It is also much easier to come then than it is when older and more hardened in sin. The young tree or sapling is more easily trained up into the desired shape than the old and hardened oak that has stood the storms of centuries—so it is with our lives. The other day, while driving along the highway, the writer could not help but notice two small children walking along in each other's embrace, the dearest and best of friends, and the words of our blessed Master came to mind: "Verily I say unto you, except ye be converted, and become as little children, ye shall in no wise enter the Kingdom of Heaven." Our Saviour could not have set forth a better example of what we have to be before entering that Holy City. If a person does not come to Christ in youth, it is seldom they come at 40, 50 or 60—taking that last and great risk, a death-bed repentance. If such a one is cut down without a moment's warning—as so many are in this fast age—then we write across their life the sad word, "Lost." Can we imagine anything worse? No; not this side of eternity. Our Saviour said, "Be ye also ready, for in such an hour as ye think not, the Son of Man cometh." It is also said that he will come as a thief in the night. Dear reader, you may not see to-morrow's sun rise.

Few of us realize the great risk we are running by putting off the day of our salvation. We are told to seek the Lord while He may be found, and to call upon Him while He is near. There may be a certain time in your life when something seems to be telling you to accept the Saviour and to come out on His side. Dear reader, this is a time when the Lord is near, and it is your duty to call upon Him, lest it is the last invitation. God has also said, "My Spirit will not always strive with man."



"Far From the Madding Crowd."

Our Saviour gives His children many precious promises. There is one that seems very comforting. He not only promises to be with us on the rough voyage of life, but He says, "So I am with you always, even unto the end." What a great Friend to have in the crossing of Jordan!

May we all be able to sing that beautiful old hymn, "Abide with me, fast falls the eventide, the darkness deepens, Lord with me abide."

Dear Hope,—I was so glad to get your letter again in "The Farmer's Advocate." I have just finished reading it, and it is just the kind of a letter that helps me along my path in life. I have missed your letter so much for several weeks now. Those little letters from subscribers are very good, but none of them seem to help or uplift us like your own, and I hope to see a nice letter of your own every week. I hope you will not think me selfish, but I am struggling for that higher life every day, in fact, nearly every hour, and as no real Christian people live near us (and we are five miles from church, and roads bad), I am sure you will understand why I appreciate your lovely talk with us. Yours very truly,  
READER.

## The Ingle Nook.

[Rules for correspondents in this and other Departments: (1) Kindly write on one side of paper only. (2) Always send name and address with communications. If pen-name is also given, the real name will not be published. (3) When enclosing a letter to be forwarded to anyone, place it in stamped envelope ready to be sent on. (4) Allow one month, in this department, for answers to questions to appear.]

### The New House.

A long time ago Bacon said, "Houses are built to live in and not to look on, therefore let use be preferred before uniformity, except where both may be had. Leave the goodly fabrics of houses, for beauty only, to the enchanted palaces of the poets, who build them with small cost."

Now, there was a good deal of common sense in all this, as in most things that old Francis said. No one with good sense would choose to live in a house, no matter how beautiful in appearance, which was built without the slightest regard for convenience. Houses must, first of all, be good to "live in."

At first reading, indeed, the extract seems over-practical. One would almost think that Bacon made "beauty" of no account whatever. Reading a little more closely, however, one comes on a saving adverb—"for beauty only"—and going on a little further in the essay, in a portion not reproduced here, one finds that Bacon had a good deal of regard for appearance after all. He would look not only to the site—"He that builds a fair house upon an ill seat committeth himself to prison"—but he would consider the view, the laying out, the decorations, the garden, even the furnishings, "in all the elegance that can be thought upon." And so he proves that the modern fashion of trying to combine beauty with utility is not so new a thing after all.

So many of the Chatterers have asked me questions about house-building of late that I have decided to run a number of pictures of houses and diagrams of plans in our especial corner. I do not mean for one moment to say that all of these will represent my ideal, but for each I shall claim some good point. You know it is quite possible to take one suggestion from one house, another from another, and so on, and so combine all to one's own satisfaction.

Some of the pictures will represent expensive houses, some very simple ones, but each will have some point which may give valuable suggestion to the mind that is keenly on the lookout for ideas.

Now that the women are beginning to take such an interest in house-building, perhaps there may be some hope that originality of design may be more frequently seen. In the past the planning has been left almost wholly to "the men." They, too much occupied with other things to fuss much over it, have left the details pretty much to the architect or the contractor. As a re-

sult, our architecture, in far too many places, has been drifting into a deadly monotony. Now, this is all wrong. We should try to build a house that will express ourselves, not one that looks exactly the same as five thousand others along the road.

With to-day's issue, then, appears the first illustration of our series, which shows a substantial cement-block house with a very wide veranda, much wider than the photo well shows. Were the house mine, and in the country, I would navigate to have the kitchen handy to such a veranda as this, so that I might live on it just as much as possible during summer.  
D. D.

### A Budget from Auntie.

Dear Dame Durden,—I was so sorry to put you to so much trouble. Was going to send you the photos after the London Show, but they appeared in "The Farmer's Advocate" before that time. Just think of the trouble and worry looking over so many papers, but you would be partly repaid if you could see the boys looking at themselves in the magazine. My little ones send many thanks to you. I have looked in so many of "The Farmer's Advocate's" to find the name of that book you told me to read to my little ones, to tell them through flowers about growth and life. Would it be too much trouble to publish again?

I am glad Novice wants to know more about stencilling. I want very much to

dozen who have never even said they had received my gifts.

Enjoyed that article in the Ingle Nook of February 24, 1910,—the best substitute for meat,—does not say who wrote it, but I think it was our Dame Durden. You will say it is a good thing I only come once a year, by the length of this letter. Just publish what you think would be interesting. Thanking Dame Durden, Hope and the Nookers for their kind help.  
AUNTIE.

Wellington Co., Ont.

My dear, nothing that I can do for the Chatterers is a trouble. Was the book which I mentioned Grant Allen's "Story of the Plants"? I think, however, that you would have to read this book yourself and re-tell it, in simpler language, to the children. I have sent you, by post card, the name of a firm that publishes fine nature books.

You can get stencilling patterns from the Art Metropole, Yonge St., Toronto. You need no outfit but patterns and brushes, because you can mix your own coloring more cheaply than you can buy it. Use just turpentine and tube paint, or else ordinary dye. Many buy the stencil paper and cut out their own designs, but of course this is a little difficult.

Whether you have a pantry or just wall cupboards must depend upon your own liking. Some prefer the one, some the other. Think it out, won't you? Personally, I should like the wall cupboards best.



Attractive Homes.

A sample of cement-block construction. Home of Mr. Elias Lemon, Owen Sound, Ont. (Photo by Allison.)

do some curtains for my home. Where do you get the patterns? I see Grateful has done two pairs of curtains. I wish I could slip into her home some afternoon and get a lesson, for I seem stupid about it, then I could give Grateful a lesson on pyrography? We buy a board of sheet basswood, make our own articles, and draw designs. We had a high candle stick turned out of a stove-wood stick of basswood; very pretty when finished. It is very easy and interesting work; nice to do in summer-time, as the smoke does not effect eyes when out in the air.

Some of the Nookers asked about enameled tops for kitchen cabinets. Mine has one. I always use it for baking, and like it very much. When not in use I keep it covered with oilcloth. Have had it three or four years, and the enamel is getting thin. Was thinking of giving it two or three coats of white enamel.

Would like to know which would be the better plan: large, bright kitchen with four windows, wall cupboards and kitchen cabinet, or small kitchen, two windows, kitchen cabinet and pantry?

You will think I need not say anything. I have been so long in sending thanks to you, but could you tell me why so many never say or send one word of thanks for Christmas and wedding gifts? I think I could name over a

It is almost unpardonable to neglect to acknowledge the receipt of wedding gifts. I trust no reader of our column will ever be so remiss.

You will understand that none of the "meat substitutes" mentioned are really perfect substitutes, although approximately so. It is really advisable to use meat, as a source of protein (muscle-builder), once a day.

You may send the designs for pyrography to me. Many thanks. D. D.

### Plant Queries.

Dear Dame,—Having received benefit so often from your columns, I feel like applying to it in many times of doubt.

I have a veranda, enclosed with lumber and glass at the top, facing the north-west, in which house plants do splendidly in summer. Do you know of any seed, cheap, and not too delicate, which I could plant in boxes and make a very good show early? Would climbing nasturtium do; or is there not some sort of foliage-plants grown for that purpose?

Our neighbor received a "Resurrection Plant," which I promised her I would enquire from you how to manage, as it is quite a novelty to us.

I have a pantry and wash-room at the end of kitchen. I had the wash-room painted a clean blue and varnished paper of a block pattern and cream, mustard. Would like to do pantry over this year.

Would rather have it different from wash-room, but thought, perhaps, too many colors off the kitchen might not look well. Could I not get an oiled or varnished paper of a wood pattern, oak or spruce? It is all painted now, and I'd like a change of something light.

The "Cost of Living," how it seems to interest the city people! Why don't they move to the farms? Why we're enjoying it. We can pay for our farms or save money now (providing we have the improvements we need). And, of course, we can enjoy the high-priced foods too, knowing they were not in cold-storage. Settle in the country, young people, with the intention that you will make the farm serve you and you not serve the farm, as that is what so often makes farmers narrow and dull.

Now, here's a little advice to the dissatisfied ones in the country, after which I shall make my exit, feeling as though I have stayed long enough:

Be friendly with the people; keep respectable company; have plenty of good reading material in the home, and when you have to go to do chores, wear boys' rubbers and a cover-all apron, and you will not feel the country quite so monotonous and easier to endure than the "cost of living in the city." QUIZZ.

Simcoe Co., Ont.

For window boxes on north and west (I should think the same would answer for your veranda), Ida Bennett recommends wild cucumber, maurandya vine, moon flower, morning glory and manetta vine for climbers; and for other positions, geraniums, caladiums, fuchsias, asparagus, leopard plant, Boston ferns, giant white antirrhinum, heliotrope, phlox drummondii. Most of these had better be bought by the plant or tuber, but seeds of moon flower, morning glory and phlox drummondii can be bought at small cost. Nasturtiums are very satisfactory everywhere, and I do not see any reason why they should not do well on your veranda. I imagine Japanese hops, or aristolochia (Dutchman's pipe) would give you excellent shade, provided you gave the plants plenty of root-room. Would it not be possible for you to plant some of the vines in the solid earth outside of the veranda?

If your friend's resurrection plant is like mine, all that is necessary to do to it is to place the root in water in a shallow vessel. The fronds unfold rapidly, but do not seem to make much growth. At any time, if removed, the plant will dry and curl up, only to unfold again when placed in water.

I think you can get varnished papers in almost any color. If I were you I would not have paper at all, but would paint the walls and ceiling of both pantry and wash-room. It would be better not to have too many colors off the kitchen.

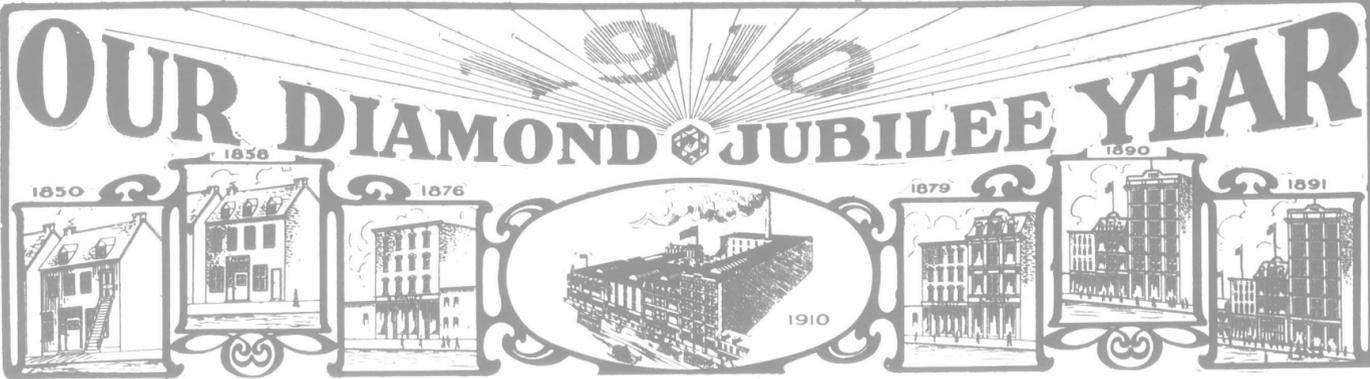
I am very sorry it was not possible to answer this letter sooner.

### A Request.

Dear Dame Durden,—Having read "The Farmer's Advocate" for quite a number of years, I feel I ought to show some little appreciation of all the helpful hints we have derived from it. I certainly enjoy reading "Hope's Quiet Hour," and all the nice recipes and helpful suggestions; also letters, and especially Lancashire Lass' and her poems. I have a splendid recipe for spicy vinegar pickles, which I would gladly furnish if anyone would like it. Thanks for the nut-cake recipe.

Now, I am going to ask a favor of someone. Could anyone be so kind as to give me a recipe for elderberry salve? When I was a schoolgirl I suffered terribly with chilblains, and I remember having one on my heel that no salve seemed to heal, when a friend of ours sent me a tin box of elderberry salve, that acted like magic. Her daughters procured the elderberries in the south of London, as we lived in the city. Now I have a son home from school for two weeks with the same complaint. I have a dear friend of 84 years, who says she remembers her mother making this salve, but she herself cannot remember how it was made. Those of you who are fortunate enough to have a grandmother, ask her if she knows. I would be so glad to get the recipe.  
MRS. MAC,  
Middlesex Co., Ont.

We shall be glad to have the pickle recipe. The mustard pickle is held over until later. Many thanks.



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Yours truly, H. D. P.

Yale, B. C., February 22nd, 1910.  
THE PAQUET CO., LTD., QUEBEC:  
Gentlemen,—The suit reached me on the 19th inst., and am pleased to say that it is highly satisfactory, and will be glad to recommend your House in future—well made and a good fit.  
Yours truly, W. D.

Picton, N. S., March 27th, 1910.  
THE PAQUET CO., LTD., QUEBEC:  
Dear Sirs,—Kindly send me samples, as I want to get a suit both for work and Sundays. I see a few of your suits here and they are the best I have seen for a long time and do not know how you can put them up so cheap with such good work on them.  
Yours truly, J. C. P.

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**WRITE TO-DAY!**

**Scalloped Potatoes.**

Dear Dame Durden,—Will you please publish a good recipe for scalloped potatoes?

Is the meat used in making meat loaf cooked before it is put through the meat chopper?

Thanking you in advance. MRS. W. H. Dundas Co., Ont.

Scalloped Potatoes.—Peel raw potatoes and cut into thin slices. Place in the baking dish a layer of the potato 1 inch deep, season with salt and pepper, and add a dusting of flour and a dot of butter here and there. Add layers of potato and seasoning until the amount required has been put in. Add milk to cover and bake 14 hours, removing the cover during the last 15 minutes to brown the top. Serve in the baking dish, with a napkin pinned round.

Either raw or cooked beef may be used

for beef loaf. In the latter case the loaf does not require, of course, to be so long in the oven.

**Cleaning Ostrich Feathers.**

A question re cleaning ostrich feathers has been handed me from one of the other departments. In looking over my notebooks I find the following:

Make a thin paste of flour and gasoline in a dish, and wash the plume in it, then rinse in a clean paste and hang up to dry. When perfectly dry the flour will shake off, and the plume will be curled, fluffy and white and ready to be drawn. Curl each strand a very little by drawing over a very dull knife. You know, of course, not to use gasoline near fire or flame of any kind—not even in the same room with it. Open air, in the shade, is best.

**My Flowers.**

I am a lover of flowers. My memory goes back to the first time I saw them. I was sent by my mother to a gardener's for vegetables, who also grew flowers for sale. To me it was a wonderful sight, flowers of every hue. The most clear to my memory were the wallflowers. Their fragrance I never forgot; it lives with me still. We lived in Hull, Yorkshire, Eng., where houses were joined together; not enough soil to fill a flowerpot. In my childhood we came to Canada, where land was plentiful, and since then I have been growing flowers.

In this fair Province of Ontario there is no part of the year but flowers may be had in abundance. In the early days of April, before the snow is all gone, the crocus and snowdrop and glory of the snow spring up, and soon are a mass of bloom, followed by pretty blue scilla, hyacinths, daffodils, tulips and lilies. My

usual custom with these bulbs is to take them up after the foliage is dead, and plant them again in the fall in a different plot. Some bulbs deteriorate, notably hyacinths. These I only plant twice. Each fall I try to add some new variety. Early in October I planted some grand bulbs I had not had before. While planting them the thought came to me, I may not live to see them bloom, as I am an old woman, but then I thought someone will. We live near the road, and on the way to school when the children see the flowers they bound up and stoop down and smell the delicious fragrance of the lovely blossoms, while I look on, a shut-in, till the cold is past.

Let me tell you how I obtained my first bulbs. In my early married life I had a very extensive flower garden of annuals and perennials. One year I had a large bed of portulaca. I wrote to a seedsmen, asking him if he would ex-

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Please Mention this Paper.

change the seed of them for bulbs. He said he would. My little girl and I picked the seed, a very tedious task it was, but we persevered. Our reward was a grand display of early flowers the next spring, and for years after. I especially love the early flowers, as they come at a time when most needed. The culture for them is good garden soil, no manure, and well-drained land. After taking up the bulbs, which I keep in paper bags till planting time, we apply well-rotted manure and dig it under, sometimes plant it entirely of gladioli, then again of geraniums.

We have nearly all kinds of perennials which bloom yearly, a very satisfactory kind to have, as they need so little care and come before the annuals are ready. The peonies and roses flower together, and who does not love them? Last year ours did not bloom till July, but they were lovely. The rose aphid is kept in check by applying white hellebore. We give our roses all the soot and suds we have as a fertilizer.

For annuals I like the different kinds in small beds; pansies in a shady nook, where the sweet faces will look out like pictures of innocence. Phlox drummondii is very fine by itself; also verbena and petunia. I always have a fine bed of nasturtiums, of which the more one picks the more one has. That is also true of the lovely sweet peas, which I find enjoy the shade part of the day. The earlier they are sown the better. They require deep culture, with woven-wire netting to support. No flower will respond better with care than sweet peas.

Several kinds of ferns, with their delicate feathery fronds from the woods, always find a cool spot in my garden. I have a warm place in my heart for them, though they have not a flower.

I had almost forgotten the asters. When we buy our vegetable plants, I send for a dozen aster plants; these we plant wherever there is room. They are essentially a fall flower, not much like the asters of our youth, but grand specimens of the florist's skill. The tall ones need support, as the flowers are so large and heavy.

There are so many hardy shrubs which I think indispensable in a garden—the lilacs, snowballs, flowering almond, weigelas and spruces. These are old-fashioned, but still dear to me. For the winter we have a number of geraniums of different colors, primroses, and primula and freesias. I generally use slips for winter, as geraniums that bloom in summer will not, as a rule, flower in winter. My primroses are magnificent, "ever-blooming." They rebel at having their faces washed, like some children I have known, while geraniums revel in a bath. We set ours in the washtub after washing, and with a sponge wash every leaf, then rinse them in clear water, not too cold. We keep them in the kitchen, as the steam is good for them, and they get the most sun. They are now simply grand, the foliage a deep green and full of buds—a thing of beauty, though not a joy forever. Sometimes in the winter I have the Chinese lily grown in water. I have had them in perfection; in fact, the only flower I was ever dissatisfied with was the tuberose. In winter, when the temperature goes below zero, we have to cover our plants at night to keep them from freezing. They are placed on a table in a corner between the wall and the cupboard, covered plentifully with newspapers, and while it is freezing hard in the room they will come out untouched. I always like to cover them myself, as I can go to bed feeling assured they are safe for the night.

The soil I use for all my plants is leaf mold from the woods, mixed with sand. In earlier days, when I grew so many more than now, my husband would bring me a wagonload of fine black earth from the woods and dig up the beds for me. He also made gravel walks between them, and I did the rest, sowing, transplanting and weeding. I never had much weeding, as I never allowed weeds to grow, always moving the soil, as that conserves moisture. I think I have grown as many flowers as most farmers' wives. A dear old Scotch lady, who at one time lived near me, used to say, "I dhina ken hoo ye mind at their names, I'm sure I couldn't," but I did, though some are very odd.

I feel sorry for the children who are raised in homes without flowers. They

have a refining influence in the home. My little ones very early showed their love for the beautiful blossoms. My first little girl one day picked the heads off all the daisies in her pinafore and brought them to me and said, "Pitty fowars, mamma!" I was sorry for the daisies, but she soon learned better. She has long been sleeping beneath them. My youngest boy would run out in his nightie in the mornings to count the flowers before having his breakfast, and there was great delight when anything new was discovered. My flower garden now is only a ghost of other days, as I am in the sere and yellow leaf; my youngest daughter doing now all the hard work involved in flower culture and lawn. She takes pleasure in the work. My husband and I raised seven children to manhood and womanhood, not one coarse or mean of nature, all doing their share for the uplifting of humanity. This I attribute to their surroundings and the example of pure lives. They were all born and raised to men and women in a log house. Two were married from it amidst the flowers, and he who was the joy of my life is sleeping beneath the roses. Life was begun in a garden. May not the home we hope to gain through death be to the lover of nature another garden in a new earth, watered by mists that arise, and where all we plant shall grow unblighted and fade no more? MRS. R. LAMB.

Berth Co., Ont.

#### My Vegetable Garden.

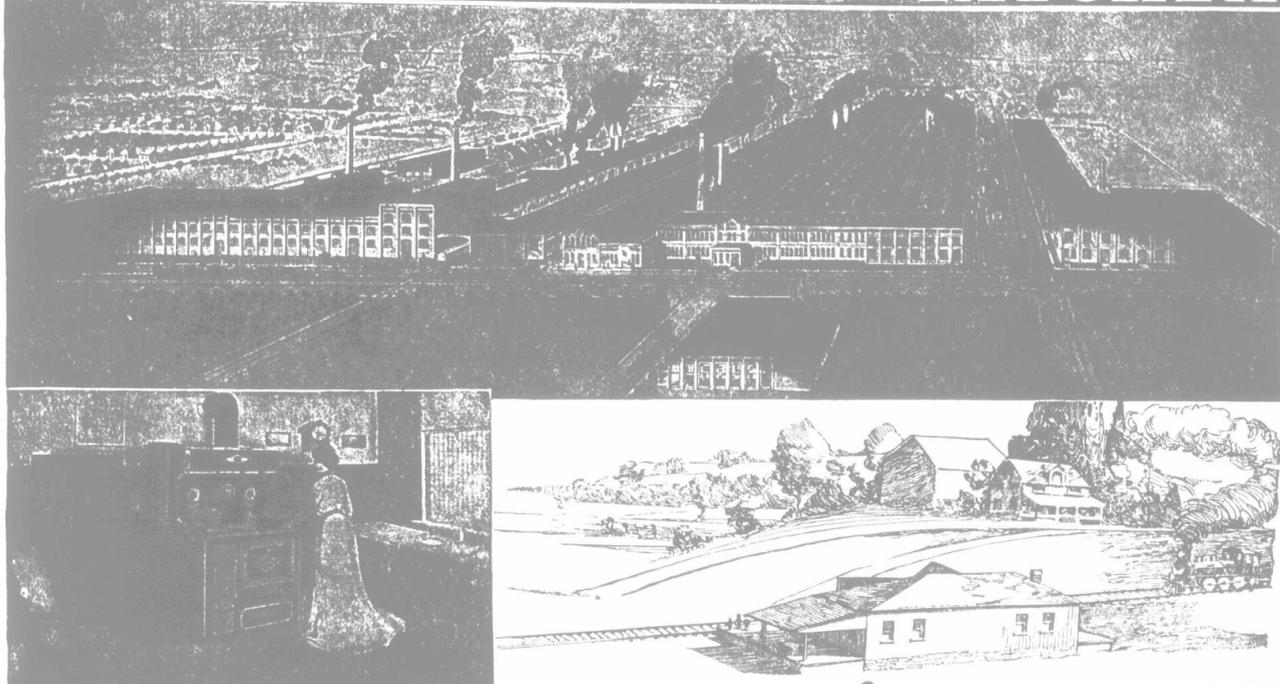
I smile as I look back to my first attempt at gardening. I can see the raised-up beds, short rows so close together one could scarcely walk between, to say nothing of the inconvenience of weeding and hoeing. I have learned much since that day, and have much more to learn, but now for what I have learned. First, I have learned to grow my garden in long rows, wide apart, for horse and scuffler to do the hard work. In the first garden grew the poppy, when it was lucky enough to come up, right in the row of vegetables. It was allowed to fight its own battle for life. No disrespect to the poppy; I still grow it, and for show it is without a rival, considering the ease it can be grown with. But there are also rows, yes and rows, of other flowers—asters, sweet peas, stocks, phlox, verbena, balsam, petunia, etc. What a vegetable garden needs most is flowers (I mean after vegetables).

We need their bright heads to cheer us. It is they that call the loudest after every rain for us not to let the earth form that hard crust, but get out with a rake and gently rake the surface to form a mulch of earth that stops the evaporation, and the warmer the weather the more important it is. What the flowers by their beauty entice me to do, the vegetables by the longing appetite they create succeed in getting the same treatment. I often think of what I read: A Chinaman said, "Have you two loaves? Sell one and buy a lily." We certainly need more than bread to enjoy life, so we need more than vegetables in our vegetable garden. The pleasure in seeing plants thrive by the power of nature's God, coupled with one's own strength and knowledge, well repays, were there no beautiful flower to cut to adorn the table or carry to a friend.

My garden has been growing in my mind's eye for weeks. I think it out, work it over and over many a time before the seed is sown. We never make a success of anything if we are not interested in it, or, I might say, if we are not intensely interested in it. The gardener who has to look among weeds for plants is a failure; much better to grow half as much and do it well. The best possible care kept up continually is what counts.

I have already told you I plant in long rows. If we do not need a whole row of one kind, use two or three to fill it out. For instance, plant a row of tomatoes next a row of lettuce, early onions, parsley, or any vegetable. By the time the tomatoes need picking the extra room will be appreciated. I sometimes set celery and late cabbage in the row where I have used out early beets. I plant cucumbers between the rows of peas. The peas are planted in two rows, not over six inches apart, and between the row about every two feet I plant two or three cucumber seeds. The

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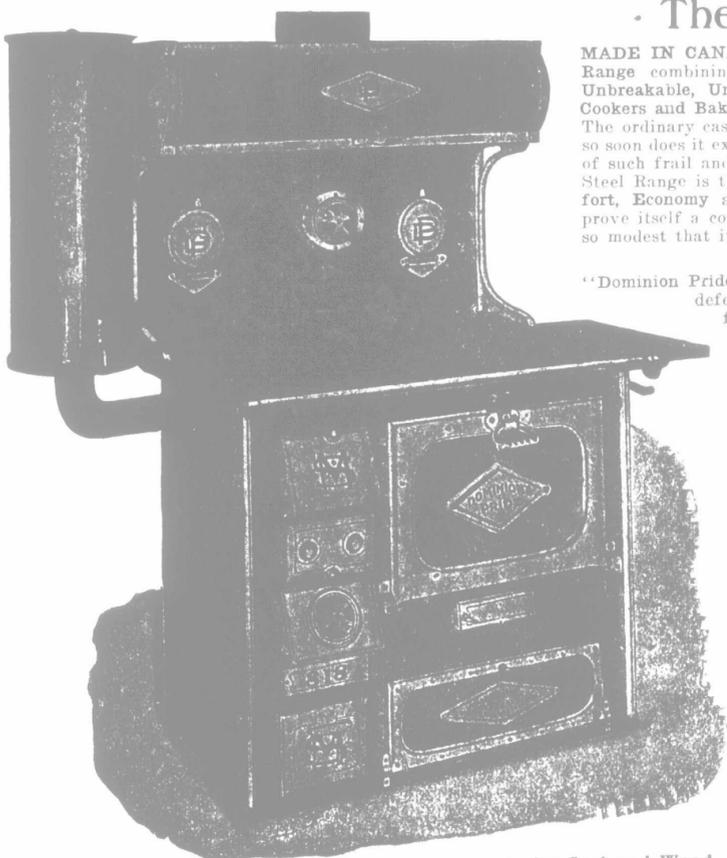
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These varieties will ripen in almost any part of Canada, under favorable circumstances. Many growers use the flint corns along with the dent in equal proportions. This gives, they claim, a richer and sweeter ensilage.

**Compton's Early.**—This 12-rowed yellow corn is a splendid variety for cobbing, and the crop of fodder is not far behind many of the dent varieties. Bushel \$1.60.

**Longfellow.**—An 8-rowed variety used in the same way as Compton's. Bushel \$1.60.

**North Dakota White.** Has given better results, as to grain and fodder, than any other flint variety in several thorough tests in Ontario. Bushel \$1.50.

**Smut Nose.**—Yellow with red tinge. A great cropper, and in our estimation is fully as good as any flint variety offered. Bushel \$1.50; 5 bus. lots, \$1.60.

**King Philip.**—Dark red kernels. In some districts greatly esteemed and deservedly so. Bushel \$1.60.

**Early Amber Sugar Cane or Sorghum.**—\$6 per 100 lbs.

**Automatic Hand Corn Planter** (the best made) \$1.75 each.

### SUNDRIES

Japanese Millet	5c. per lb.
German Millet	4c. "
Hungarian Millet	3c. "
True Dwarf ex Rape	7c. "
Thousand-Headed Kale	20c. "
Sand or Hairy Vetch	10c. "
Black Tares	4c. "
Flax for seed	4c. "

### FERTILIZERS

Nitrate of Soda	\$3.00 per 100 lbs.
Muriate of Potash	2.75 "
Sulphate of Potash	2.85 "
Acid Phosphate	1.00 "

### ROOT SEEDS

If ordering by mail, add 5c. lb. for postage.

Giant Half Sugar Mangel	20c. per lb.
Keith's Prizewinner	35c. "
Champion Yellow Intermediate Mangel	25c. "
Mammoth Long Red Mangel	25c. "
Golden Tankard	25c. "
Keith's Prize-maker Swede Turnip	25c. "
Scottish Champion	25c. "
Elephant or Jumbo	25c. "
Kangaroo	25c. "
New Century	25c. "
Greystone Turnip	25c. "
Yellow Aberdeen Swede Turnip	25c. "
Improved White Intermediate Carrot	35c. "

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124 East King Street  
TORONTO, ONTARIO.  
Seed Merchants since 1866.

## SPRINGTIME—FRECKLE TIME



Now's the time, if you freckle, to get ahead of those wee pests that disfigure a good complexion. Don't wait until they appear, begin now.

### PRINCESS COMPLEXION PURIFIER

An antiseptic remedy, removes tan, freckles, mothpatches and discolorations, and makes the skin clear, smooth and healthy; cures pimples, rashes and blackheads. Price, \$1.50. Express paid.

**SUPERFLUOUS HAIR.** Moles, etc., eradicated forever by Electrolysis. Satisfaction assured. Booklet "E" mailed free.

**HISCOTT DERMATOLOGICAL INSTITUTE**  
61 College St., Toronto.  
Established 1892.

When Writing Mention This Paper.

peas shade the young plants, and by the time the vines need the room the peas are picked, and instead of the weeds taking possession you have a fine row of cucumbers. It is also a good way to grow musk melons.

There are many little knacks in gardening, and when we discover a good one, I for one say let's pass it on. One of mine is, I do not use a hoe as much of late. I use a rake more to keep the surface loose. One covers more ground, and I find it easy; far easier than hoeing. In hoeing tomato plants, draw the earth toward them—in fact, hill up,—but in hoeing onions never; draw it away rather. Hoe peas a little toward the row. With the roots, parsnips, carrots, etc., I thin one every four inches to six, if the earth is as rich as it should be, and it certainly needs to be good earth. We use barnyard manure and wood ashes for enriching, and have the soil well drained and well cultivated; then we get the best seed obtainable. I have dealt with the same firm for years, and never have the experiences some do who patronize departmental stores. The best is the cheapest in the long run. Just so with implements. Have them just for the garden, and when needed you will not have to spend half an hour of valuable time looking for them. I use a long-handled, sharp, round-bottomed shovel; it is a handy thing to move a large-sized plant with. A trowel is best for smaller ones. Soak the ground well before lifting.

But if you are not of the garden temperament, do not attempt too much. The temperament can be cultivated, but start easy. I have seen school-teacher town girls marry farmers and raise beautiful gardens. I will tell you how one I knew started. The first attempt was added, and gradually she worked up until she grows all the vegetables necessary for the table. Far better to do this way than start a lot and give up in despair. But where there is the will a way will be found. One more discovery: a garden notebook. I will just give a few items, so you will understand: "Early Potatoes": Cut out all eyes but one; use large, smooth, good-shaped tubers; this to grow next year's seed."—By Market Gardener.

"The old newspapers around celery; put up boards on each side, fill with straw."—Two different neighbors tried with success.

"Put a little air-slack lime in row when sowing lettuce."—"Farmer's Advocate."

These are some of the knacks to try this year. It helps to make the garden more interesting. I am one who is always ready to try anything that will help. If I trusted to memory, the very thing I most needed might be on the shelf at the appointed time, but in black and white you have it. Variety is the spice of life, and taking notes helps on this line.

If housework gets monotonous, take a half hour in the garden, even if it is not just your garden hour (right here, I have an appointed hour for garden work, from eight to nine, not every morning, but every one I can manage to get it, not on wash days or Saturdays).

I have made no mention of hotbed or cold frame for starting plants. I have used both, and I have grown plants in boxes in the house, and I have sown them all right outdoors. You can grow a good garden any way if you are of the garden temperament. Certainly have the hotbed if you can. It will give you much earlier vegetables, but if you have not one do your best, your very best, and success you will surely have. Say, how would a garden competition suit the Nonkers? L.I.L.

Will you please tell us just your idea of the garden competition, so we may consider it if it is feasible? . . . Another very good essay, by "A Garden Lover," is held over until it is time to prepare the garden soil in the fall.

### Woman Suffrage.

As several have asked me questions of late in regard to this subject, I have done a little investigating, and find that in New Zealand, Australia, Finland and Norway women now vote on the same terms as men, except that in Norway there is a slight tax qualification for women. In four States of the United States—Colorado, Wyoming, Utah and



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are all you need to transform an ordinary-looking wall into a beautiful and artistic wall which will appeal to the most refined taste. Any one can apply Alabastine. Alabastine colors are permanent—they do not rub off. They give that artistic soft, velvety effect which can be produced only by Alabastine. It hardens with age, becoming a part of the wall. Alabastine can be re-coated without removing the old coats.

### CHURCH'S ALABASTINE COLD WATER

Alabastined walls are now the most popular. There is nothing so charming, so sanitary, so cheap. In the modern home, Wall Paper, held on by flour paste, is now tabooed. The sales of Alabastine in Canada have doubled in the last two years.

### FREE STENCILS

To still further popularize Alabastine and again double its sales, we have organized a Decorative Department, and are prepared to offer FREE COLOR SCHEMES and FREE STENCILS to all users of Alabastine. Write today for particulars—our advice is FREE. Let us help you to beautify your home at moderate cost.

**The Alabastine Co., Ltd., Paris, Ont.**  
31 Willow St. 8



None Genuine without little Church on Label

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Heals chapped hands, cracked lips and skin.

### White Vaseline

Invaluable internally for coughs, colds, sore throat, croup.

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Better than mustard plasters; does not blister.

### Borated Vaseline

A valuable remedy for catarrh.

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Allays neuralgic pains, nervous headache; cold in head.

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Eight per cent. gum camphor; for rheumatism, gout, etc.

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Best antiseptic dressing known.

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Quickly heals eruptions, sores and wounds.

### Pure Vaseline

Known world wide as the best and safest family remedy.

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Cells the special merits of each Vaseline preparation and gives directions for its proper use. Send us your name with street address, mentioning this paper, and we will mail you a copy, postage prepaid. CHESEBROUGH MFG. CO. (Cons'd), 379 Craig St. West, Montreal

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# SEALED LEAD PACKETS ONLY

The native purity and garden freshness of



is preserved by the use of sealed lead packets.

## AUCTION SALE

ON Thursday, April 28th, 1910

100 HEAD - Large Dairy Herd - 100 HEAD

Twenty-six pure-bred Holsteins; many 3/4 and 1/2 bred, Holstein and good grade cows, with calves at foot; 15 horses. Also boilers, engines and fittings. Giving up business.

TERMS: 7 months on approved notes. Fat cattle and sums under \$10.00, cash.

Sale starts 9 a.m. Hot dinner provided. Farm at Stop 19, Metropolitan R. R., Yonge St., North Toronto.

J. H. PRENTICE, Auctioneer. ALEX. BRYCE, Prop., C. MURPHY, Clerk. Eglinton, Ont.

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For clean, close skimming and durability the MELOTTE has no equal. It costs more, but get the best. Have a MELOTTE sent to your farm and prove this for yourself. \* \* \*

Every machine guaranteed to the customer. Unsolicited testimonials received every day. We will send our Booklet on request. Enquiries invited. \* \* \*

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Idaho—women possess exactly the same voting rights as men, and are eligible to all offices. D. D.

### The "Farmer's Advocate" Fashions.



DESIGN BY MAY MANTON.  
6445 Child's Yoke Dress.  
Age 6 months to 4 years.



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Patterns ten cents each. State age when ordering. Address: Fashion Dept., "The Farmer's Advocate," London, Ont.



## The Telephone Story

"Canada and the Telephone" is the name of an illustrated booklet which has just been published, and which gives some very interesting facts in regard to the telephone in Canada. The illustrations also indicate the value of a telephone in the rural home. If you are interested in reading the story and seeing these interesting sketches, write us and we shall be glad to mail you a copy free of cost.

### TELEPHONE INSTRUCTIONS

If you are thinking of building a telephone line and you would like some information in regard to the best methods of construction, we will be very pleased upon request to send you free of charge a copy of our NO. 2 BULLETIN, which is also illustrated, showing exactly how to build telephone lines.

### TELEPHONE EQUIPMENT

If you require telephones either for your local or party lines, it will be to your advantage to give us an opportunity of quoting you on your wants. The thousands of telephones we have now in service are giving the very best of satisfaction, the kind of satisfaction that is bringing us new business every day. Our telephones are fully guaranteed. We are a Canadian company, manufacturing telephone equipment and building up our business on the quality of our goods. If you have never used our telephones, write us and ask for a trial-order proposition.

### TELEPHONE SUPPLIES

We carry a large stock constantly on hand of all materials necessary for the construction of a telephone line. These materials are first-class in quality, and we are in a position to give prompt attention to all orders sent to us. It will pay you to let us quote you on your supplies.

PROMPT SHIPMENTS AND GUARANTEED SATISFACTION ARE MAKING OUR SUCCESS.

Canadian Independent Telephone Company, Ltd.,  
Duncan St., Toronto.

## THEY KNOW HIS GAME

Farmers and dairymen have common sense and experience. They use them in buying cream separators. They know the game of common cream separator makers who try to sell out-of-date machines by claiming disks or other contraptions are modern. They know that Sharples Dairy Tubular Cream Separators

All these 18 to the Sharples Dairy Tubular Bowl have neither disks nor other contraptions, yet produce at least twice the skimming



force, skim faster, cleaner, easier, wear longer and are superior in all ways to common separators. So they buy Tubulars and let complicated machines alone.

Tubular sales easily exceed most, if not all, others combined. Tubulars probably replace more common separators than any one maker of such machines sells. The World's Best. The manufacture of Tubulars is one of Canada's leading industries.

30 Yrs Write for Catalogue No. 193

THE SHARPLES SEPARATOR CO.  
Toronto, Ont. Winnipeg, Man.

## Buchanan's Self-Compressing Long Sling

—the result of 33 years experience in making Pitching Machines. Consists of three slings and sectional pulley for drawing ends together. Easy to operate, quick to work, and exceptionally strong.

We make all kinds of Pitching Machines—Swivel Carriers and Tracks, Slings, Harpoon Forks, etc. Write for catalogue.

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BURNS MANTLE LIKE GAS. making gaslight from kerosene. Odorless, noiseless, absolutely safe. 100 to 300 candle power light. Burns 16 hours on 1 quart of kerosene. Lights like any lamp. Needs no generating. Burner fits any screw-glass lamp, including the Rayo Sati-faction guaranteed. For houses, stores and factories. Sold at prices that defy competition. Live agents wanted. Send for particulars. DEPT. A. SIMPLEX GAS-LIGHT CO., 23 PARK ROW, NEW YORK

## Making "New" Clothes Out of Old.

THE POSSIBILITIES OF DYEING.

Now is the time that the cleverness of the housewife, or rather the mother, is made apparent by the gathering of articles of dress or wearing apparel, and saving them from the housecleaning rubbish box. In this housecleaning time one will go through old trunks and boxes, discarding garments right and left, and with a last sigh for a frock that has done good service, throw them away with the other things that have accumulated during the year.

The wise woman will not do this. She will look these clothes over carefully, and if the material seems good, she will lay them aside for future use. Just because the dress has become faded, or lost its freshness, or the shade is out of fashion, is no sign that it has outlived its usefulness. There may be changes in style since the old dress was worn. But these changes in style have no terrors for the thrifty woman who knows the possibilities of dyes. If the materials in last year's clothes are seemingly good, but a little faded or soiled, the color may be converted into one of the new, fashionable shades, and with a few up-to-date patterns, "new" dresses may be made out of the old.

Remnants, that are real bargains, are on sale quite often in the different stores, the only reason for the low price being that the shade is out of fashion. Quite a saving in a new suit can be made by buying up such pieces and dyeing them to meet the dictates of fashion. If the material is wool or silk, a dye that is especially adapted to these materials should be used. If it is linen, cotton or mixed goods, a dye made for cotton will give the best results.

The use of dyes for coloring trimmings to harmonize with a dress or suit is endless; while faded hosiery, veils and feathers can be made to give longer service by using dye to brighten or change the color. Portieres, couch covers, table covers and shadow curtains can also be given new life, and will fill the housewife's heart with joy at the marvellous color schemes that can be carried out in her home with little expense.

There are a few precautions, however, that should be used before and during the dyeing process, but if the directions that are given with the dyes are closely followed, no one need have other than the best results. The first thing to be done is to have all the garments or wearing apparel free from grease. Grease spots can be taken out with benzine, and afterwards washed with warm soapsuds. Remember that all dyeing should be done at a gentle boil, and use a vessel large enough for the proper manipulation of the goods. Be sure that the dye is completely dissolved before putting it into the dye vessel. Keep stirring the goods. Use a smooth, round stick, such as a

broom handle. Do not use anything sharp or pointed, as it might tear the material. Turn the goods gently, completely, and with absolute regularity. Many of the uneven results obtained occur through poor manipulation. Do not rush the dyeing because the shade looks beautiful or deep enough, for all colors appear much darker when wet. Full shades usually require about an hour's boiling. Remember also, that all articles must be well washed in many changes of water after the dye, or until free from color; otherwise the color may crook. Never dye a light color in a vessel which has had a dark color in it without first cleaning the same thoroughly.

Now, a word about the colors. If the original color is white, any color can be dyed on it. If it is cream, it can be dyed any darker shade of similar character.

Red can be dyed a darker red, crimson, wine, navy blue, brown or black.

Orange a darker orange, olive, red, brown or black.

Yellow a darker yellow, olive green, orange, red or black.

Green a darker green, olive, brown or black.

Blue a darker blue, navy, plum, dark brown, dark green or black.

Violet a darker violet, plum, olive green or black.

Brown a darker brown, wine color or black.

Greys can be dyed a darker shade, wine, maroon, navy blue, dark blue, green, brown or black. Or if very light, lavender, pink, rose or baby blue.

Good judgment should be used in combining shades, for you cannot dye a light shade over a dark one without first stripping. Nor a light shade over a dull one. The number of shades which may be produced by mixing two or more colors is limitless. Many textile mills produce their whole range of shades from about eight or nine standard colors by mixing them in different proportions.

Home dyeing is quite a simple operation, and if the home dyer will only use good judgment and observe the precautions given above, failures will rarely occur.

A new qualified judge in one of the small towns of the South was trying one of his first criminal cases. The accused was an old darkey who was charged with robbing a hen-coop. He had been in court before on a similar charge and was then acquitted.

"Well, Tom," began the judge, "I see you're in trouble again."

"Yes, sah," replied the darkey, "the last time, Jedge, you was ma lawyer."

"Where is your lawyer this time?" asked the judge.

"I ain't got no lawyer this time," answered Tom. "I'm going to tell the truth."

## A Telephone With a Muzzle

A correspondent writes to the Canadian Independent Telephone Association:

"Personally, you have my sympathy and support, but as Secretary-Treasurer of a Telephone Company which has a majority of 'Northern Electric' 'phones, I find it wisdom on my part not to be speaking too loud on these subjects."

The above statement is one illustration of the influence which the "Bell" monopoly exercises over those rural companies with which it does business. If you cannot buy apparatus without sacrificing your independence, it would be wisdom to purchase from concerns which do not interfere with your freedom.

The Canadian Independent Telephone Association does not sell telephone equipment or supplies, nor does it recommend the patronage of any particular manufacturer. It is, however, prepared to supply a list of firms which furnish apparatus of the highest grade, and which you can patronize without forfeiting the right to give voice to your opinions and to manage your affairs as you may think best in your own interest.

Why purchase apparatus from concerns in the control of the "Bell" monopoly, when you can obtain the best and most modern equipment from independent manufacturers who have fought your battles and made rural-telephone service a possibility.

Read the following extract:

Select Committee on Telephone Systems, Minutes of Evidence, Page 552.

By Mr. Chrysler:—

QUESTION—SO THAT THE BELL TELEPHONE COMPANY, Except the Directors' Shares, hold all the issued shares of the Northern Electric and Manufacturing Company?

ANSWER—(By C. F. Sise) THEY DO.

QUESTION—WHO ARE THE DIRECTORS OF THE NORTHERN ELECTRIC AND MANUFACTURING COMPANY?

ANSWER—THEY ARE PRACTICALLY THE DIRECTORS OF THE BELL TELEPHONE COMPANY.

The Canadian Independent Telephone Association exists for the purpose of removing the evils of monopoly in telephones, and assisting the people to secure an unrestricted service by the establishment of systems under local ownership and control.

If you are interested in the organization of a local, municipal, or rural-telephone system, and require advice or assistance, write to

Francis Dagger, Sec.-Treas.

Executive Offices.

21 Richmond St. West, Toronto.

## STOCK MEN

When you are wanting any cuts of Poultry, Live Stock, or for Advertising, try our specially deep-etched plates.

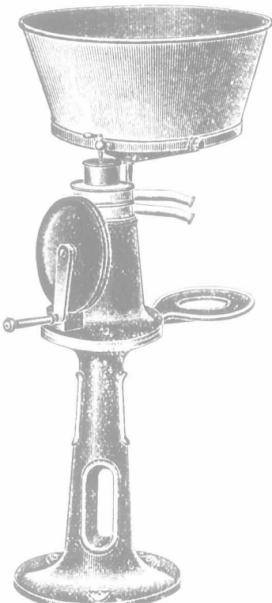
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WEAR LONGER  
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Write us your wants.

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COMPANY  
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When Writing Mention The Advocate

The "PREMIER" pays for itself the first year.



The "PREMIER" is Simplicity itself.

IF YOU TRY

## The PREMIER Cream Separator

you cannot help but admit that it is the **easiest-running Separator made.** Our **HONEST** competitors admit this.

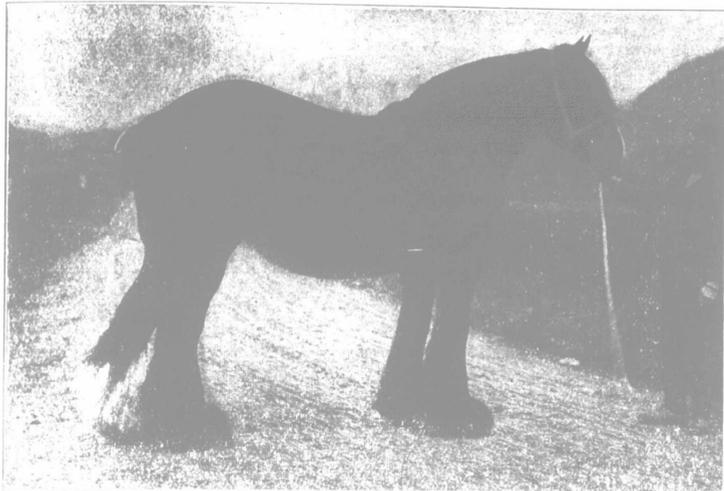
Before buying a Cream Separator we ask all intending purchasers to give the **Premier** a fair and unbiased trial on their farms, if necessary, alongside **any other make.**

We are quite willing to accept the result, and **are confident** that where **clean skimming, ease of operation, superior material and workmanship** are the chief considerations, **the Premier will be purchased every time.**

WRITE FOR FREE CATALOGUE.

The Premier Cream Separator Company  
TORONTO, ONTARIO.

MARITIME BRANCH: ST. JOHN, N.B.



## BREEDERS !

Insure your mares and foals against risk of death during foaling. Why take a chance of loss of a valuable mare when a policy in

### The General Animals Insurance Company of Canada

will protect you? If you are shipping horses West, we will insure you against loss while en route, from any cause whatever. Write for particulars to

**The GENERAL ANIMALS INSURANCE CO., Limited**  
25 Toronto St., TORONTO.

J. D. REESOR, Manager Western Ontario.  
Telephone, Main 4154.

### Current Events

A find of silver ore has been made in Wellington County, Ont., within a few miles of Guelph.

Premier Deakin was defeated by the Labor Party in Australia's Federal election last week.

Serious earthquakes have occurred of late in Costa Rica. Much loss of property has resulted.

The Quebec Government has forbidden the export of pulpwood cut on Crown Lands, and the Province will manufacture its own paper in future.

The Wesleyan and China Inland Missions at Changsha, the capital of the Province of Hunan, were destroyed by rioters last week. The missionaries sought refuge, and two British gunboats proceeded at once to quell the disturbance.

Mr. Asquith's veto resolutions were approved of, amid scenes of great excitement, in the British House of Commons, on April 14th, by a majority of one hundred and three. This was rendered possible by the final agreement of the Nationalists to support the Budget, in order, Mr. Balfour claimed, "that they might thereby get home rule." In introducing the bill, Mr. Asquith intimated that, in case of refusal by the House of Lords, the Government would feel it necessary to advise the Crown as to what steps were necessary to insure their policy receiving statutory effect. Were such a con-

## For Farmers' Use Only—Jones Patent Hay and Grain Elevator

The Only SLING-OUTFIT on the market that can LOWER its load in the mow. This SLING-OUTFIT will unload your whole harvest of Hay and Grain bound or unbound, such as Hay, short dry Clover, loose Barley, Peas, Sheaves, Seed, Clover and Cornstalks. And the beauty of it is, it places its load in the mow in such nice shape. The sling load don't have to fall all the way from the track, in the peak of the barn, down to the mow, as with all other Horse-forks or Sling-outfits.

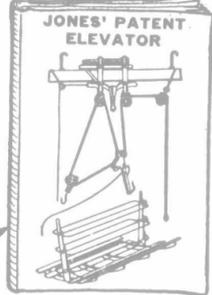
The JONES PATENT ELEVATOR LOWERS its load from the track right down to the man in the mow—then he can take his fork and swing load to any part of mow and trip it. In this way mow is kept level at all times, saving nearly all the work of mowing away, besides doing away with old time packing down of hay and grain in centre of mow.

The JONES PATENT ELEVATOR has many other new and important improvements, all of which are explained in our FREE catalogue.

THE JONES PATENT ELEVATOR is made of finest malleable iron and steel of double weight and strength. It is the strongest elevator, and unloads any load of hay or grain in three lifts.

There are THOUSANDS giving EXCELLENT SATISFACTION. We will ship you a JONES PATENT ELEVATOR ON TRIAL. After you use it, if you are not pleased, ship it back to us and we will cancel your order. This ELEVATOR is sold on EASY TERMS, and will pay for itself first season. Drop us a card and we'll send booklet FREE.

The Hamilton Incubator Co., Ltd.  
5 Hamilton, Ont.



FIRST ANNUAL OTTAWA HORSE SHOW  
HOWICK PAVILION, OTTAWA.

MAY 4th, 5th, 6th and 7th, 1910

Undoubtedly the biggest event of the season. A prize list of over FIVE THOUSAND DOLLARS OFFERED

Stabling on the grounds. Cheap Excursion rates will be given on all Railways, which will include admission to the Show. The best time to visit the Capital. For prize lists and all information, apply to R. J. BIRDWHISTLE, Secretary, 49 Metcalfe Street, OTTAWA.

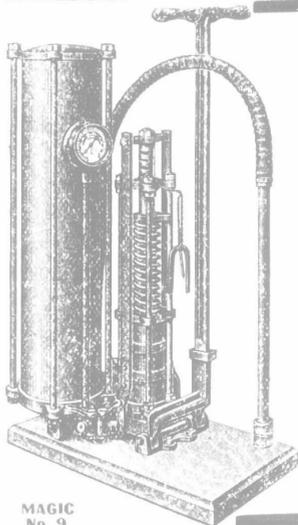
cession found impossible, the Government would either resign office or recommend the dissolution of Parliament, assured that at a new election the judgment of the people would be carried into law. An impression is abroad, however, that the Premier will not ask the King for guarantees.

### TRADE TOPIC.

Shearing sheep by machine is a system of doing the work that has come to stay. In those sections of America and other countries where flocks of any considerable size are kept, the power shearing machine is in common use. It is generally conceded that where a flock of 40 to 50 sheep are kept, it pays to have a hand-power machine. An enterprising man in any district may make it a paying investment to purchase a machine, and contract to shear the flocks in his neighborhood at a stated price per head, and, with a horse-clipping attachment, may make money in the winter and spring also, as the clipping of horses is steadily becoming more popular. The Chicago Flexible Shaft Co., in their advertisement in this paper, call attention to their Stewart ball-bearing clipping machines for horses and sheep, which are sold at a very moderate price. See the advertisement, and write for their descriptive catalogue and illustrated pamphlet entitled, "Expert Instructions on Sheep-shearing by Machine."

### A PROLIFIC COW.

Dennis Hurley, a farmer living near Brasher Falls, N. Y., has an eight-year-old grade Ayrshire cow that in five years gave birth to twelve calves, as follows: At three years of age, twins; at four years, triplets; at five years, twins; at six years, triplets; at seven years, did not breed; at eight years, twins. All the calves are living, with the exception of the last pair.



**MAGIC PUMP No. 9.**  
Easiest-running hand pump ever made. Largest capacity. Highest pressure.

**Challenge Power Sprayer.**  
Will spray 400 gallons an hour at a pressure of 200 pounds.

**LITTLE GIANT No. 70.**  
High-powered barrel pump.

These pumps are made for DURABILITY, EFFICIENCY and POWER.

WRITE FOR CATALOGUES.

## Summer Spray

NIAGARA BRAND LIME-SULPHUR ARSENATE OF LEAD.

NIAGARA is the only absolutely reliable Lime-Sulphur Spray, because it is made right. It is a permanent solution of highest insecticidal and fungicidal power. Analysis is stamped on every package, and it is guaranteed by a strong CANADIAN COMPANY.

ARSENATE OF LEAD is the one poison that kills all kinds of chewing insects. It is endorsed by all leading Entomologists and Horticulturists. It will not burn fruit or foliage. It sticks to the leaves. It mixes easily and stays mixed.

FARMERS AND FRUIT-GROWERS, with these sprays you can grow Apples and Pears free of scab and worm; Potatoes free of blight and bugs; Cherries and Plums free of rot and curculio.

COMBINE these TWO SPRAYS in ONE. This saves time and money. SPRAYING is investment, not expense.

Order now. Be ready when blossoms fall.

Write for our Book: "SPRAYS AND HOW TO USE THEM."

NIAGARA BRAND SPRAY COMPANY, Limited, Burlington, Ont.

NIAGARA SPRAYS ARE ALSO MADE BY:  
Niagara Sprayer Co., Middleport, N. Y. Oregon Spray Co., Portland, Oregon.  
Bean Spray Pump Co., Cleveland, Ohio. Medford Spray Co., Medford, Oregon.  
Hood River Spray Mfg. Co., Hood River, Oregon.

MAGIC No. 9

**POULTRY AND EGGS**

Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 30 cents.

**ANDALUSIAN** eggs, \$1.50 per setting; Brown Leghorn eggs, 75c. per setting. Ralph Thomson, Henryon, Ontario.

**ANDALUSIANS**, Blue; S. S. Hamburgs; Buff Leghorns, 15 for \$1.25; 30, \$2. Black Minorcas, 15 for \$1; 30, \$1.75; 50, \$2.50. D. McKay, Cowal, Ontario.

**BUFF** Orpington eggs that hatch; nine chicks guaranteed. Four special pens, \$3 setting. Splendid utility stock, extra heavy layers, \$1 setting. Illustrated catalogue free. Hugh A. Scott, Caledonia, Ont.

**BROWN LEGHORNS**—Great layers and prize-winners. Eggs from special pen, one twenty-five per fifteen. Large flock; four dollars per hundred. Arthur Master, Highgate.

**BARRED ROCKS FOR SALE**—Birds from New York prizewinners. S. S. Hamburgs and at leading Canadian shows. Eggs, two, three, and five dollars per fifteen. Thos. Andrew, Pickering.

**BLACK MINORCAS**—S. C. pure-bred, from heavy-laying strains. Eggs in Morgan baskets, one dollar per thirteen. A few cockerels for sale. Oscar Eaman, Wales.

**BARRED ROCK EGGS**—From a pen of the "National Strain." Selected for their choice barring, and persistent layers of perfect colored eggs, and mated with choice cockerels. Vigorous, blocky, barred to the skin. Price, \$1.00 per 13, or \$2.00 for 32. W. C. Shearer, Bright P.O., Ontario.

**BARGAINS**—Famous Pride of Ontario strain of Rose-comb Rhode Island Reds, White and Partridge Wyandottes; are prizewinners, record-breaking layers, large, strong, healthy, quick-growers. Circular free. Eggs, special bargain price only \$1.00 per 15. Quantity prices lower; guaranteed satisfaction. Pride of Ontario Poultry-yards, Colville, Ontario.

**BLACK** Langshan eggs are most nutritious. Thoroughbreds from Glenloch Farm at \$3 a dozen will surprise you. City office, 396 Yonge St., Toronto.

**BEST** laying strain Barred Rocks, large size. Eggs, \$1.00 per 15; \$4.00 per 100. A. E. Donaghy, Colborne, Ont.

**BARRED** Rock Eggs—From grand matings. Write for mating list. W. W. Dods, Alton, Ontario.

**BARRED** Rock eggs, safely packed in Morgan baskets, \$1.00 per 15. C. H. Chalmers, Smith's Falls, Ont.

**BARRED** and White Rock eggs, \$1 per 15; \$4 per 100. S. L. Jayne, Grafton, Ont.

**CANADA'S** best Anconas. Winter layers. Very profitable. Free circulars. Tells all about Anconas and Leghorns. Edmund Carlyle Apps, Box 224, Vice-President International Ancona Club, Brantford, Ontario.

**EGGS**—Barred Rock, Buff Orpington. Best laying strains, \$1.00 per setting; \$4.00 per 100. Wilbur Bennett, Box 938, Peterboro.

**EGGS**—From choice S. C. White, Brown and White Wyandottes, \$1.50 per 13. Have your order booked early. Mrs. Lovring, Barrie, Ont.

**EGGS** from prizewinning Single-comb Black Minorca and Indian Runner ducks; also Hamilton incubator and brooder for sale. Jno. Ogram, Listowel, Ont.

**EGGS** from pure Indian Runner ducks, 10c. Single-comb Rhode Island Reds, \$1 per 15. Frank Ballard, Gladworth, Ont.

**EGGS** from Silver Wyandottes, White-crested Black Polands, \$1.50 per 15; Barred Rocks, \$1.00 per 15; prizewinners. Robert Houser, Canboro, Ontario.

**EGGS FOR HATCHING**—From heavy-laying strain of pure-bred Black Minorcas. One dollar for thirteen. Ed. Hacker, Beachville, Ontario.

**EGGS** for hatching—From prizewinning Single-comb White and Rose-comb Brown Leghorns. Extra good layers. Eggs guaranteed fertile. One dollar per fifteen. James Snyder, Wales, Ontario.

**EGGS FOR HATCHING**—From prize stock; Barred, Buff and White Rocks, Rhode Island Reds, Black Minorcas; \$1.00, 13; \$2.00, 30. Light Brahma eggs, 25 cents each. A fair hatch guaranteed. Joseph Foster, Brampton, Ont.

**GOOD** laying S. C. W. Leghorns. Eggs one dollar per fifteen; four dollars per hundred. Martin Robertson, Kent Centre, Ont.

**KELLERSTRASS**—Cook Strain White Orpingtons. Hellyer's strain Buffs. Eggs, \$1 and \$2 setting. Stock for sale. H. Ferns, 716 William Street, London, Canada.

**LOCHABAR** Poultry yards, offer eggs from choice pens of Barred P. Rocks, \$1 per 15. Pekin and Roman duck eggs, \$1 per 9. D. A. Graham, Wainstead, Ontario.

**MINORCAS, BARRED ROCKS AND HOUDANS**—Grand layers and prizewinners. Eggs guaranteed fertile. Our fowl have won at Guelph, Toronto, Montreal, Napanee and Lindsay. Satisfaction guaranteed. Send for free circular. C. Day, Highgate.

**MY BIRDS** won over five hundred first prizes at eleven shows. Barred and White Rocks, White and Brown Leghorns, Black and Spangled Hamburgs, Buff Orpingtons, Black Javas, White-crested Black Polands, White and Silver-laced Wyandottes, Rose and Single Combed R. I. Reds; Blue Andalusians; two pens of each breed; No. 1, \$2.00; No. 2, \$1.00, per 15 eggs. Black Orpingtons, Houdans, Light Brahams, Partridge and Buff Cochins, Silver Pencilled and Columbia Wyandottes, Buff Rocks, Anconas, Golden Sebright Bantams; one pen only; \$2.00 for fifteen eggs. F. W. Krouse, Guelph, Ontario.

**PURE-BRED** Barred Rocks and Buff Leghorns, good color, excellent layers; \$1.00 per 15. William Facey, Tavistock, Ont.

**PURE-BRED** Silver-spangled Hamburgs. Eggs, one twenty-five a setting. White Leghorns and Barred Rocks, one dollar per setting of thirteen. H. Lacey, Kirkfield, Ont.

**RHODE** Island Reds, Rose-comb; bred eleven years from carefully-selected heavy winter layers of large brown eggs. Fifteen eggs, \$1.50. Satisfaction guaranteed. Jno. Luscombe, Merton, Ont.

**ROUEN** DUCKS—Eggs for hatching from prizewinning stock. \$1 for 7; \$2 for 15. J. H. Rutherford, Caledonia East, Ont.

**RHODE** Island Reds—Rose-comb. Best general-purpose fowl in the market. Eggs for hatching from imported heavy-laying strain. Two dollars for fifteen from number one pen, or one fifty from number two. B. Colwell, Box fifty, Cooksville, Ont.

**SILVER-SPANGLED** HAMBURGS—Eggs that hatch; \$1 per 15; ten chicks guaranteed. Extra heavy layers, non-sitters. Packed in Morgan baskets. Leo J. Gibbons, Iroquois, Ontario.

**SINGLE-COMB** Black Minorcas—Stock and eggs for sale. Ontario winners and great layers. Satisfaction guaranteed. For particulars write: H. Dunning, Thornton, Ont.

**S. C. W. LEGHORNS**—Prizewinning and great laying stock. Eggs, \$1.00 per 15. A hatch guaranteed. Geo. D. Fletcher, Binkham P.O., Ontario.

**SILVER-LACED** WYANDOTTES—Eggs for hatching, one dollar for thirteen. Geo. N. Harris, Lynden, Ontario.

**SINGLE-COMB** Brown Leghorn eggs from prizewinners. \$1.00 for 15. H. Weston Parry, Princeton, Ont.

**S. C. W. LEGHORNS**—Good laying strain. Eggs, \$1 per 15. H. McKellar, Tavistock, Ontario.

**WHITE** WYANDOTTES—Exclusively, standard shape, meridian layers. Eggs, \$1 per 15. W. W. Meredith, Caledonia, Ontario.

**WHITE** Wyandottes Exclusively—Bred for heavy egg production and standard points. Eggs, \$1.00 per 15. Good hatch guaranteed. Thos. F. Pirie, Banner, Ont.

**WANTED**—A few private farmers to ship me Poultry, Eggs, Dairy Butter, Syrup, and all other farm produce. Will pay highest market price. W. J. Falle, Prince Albert Ave., Westmount, Montreal.

**WHITE** Wyandotte eggs, Martin strain, farm raised, fifteen for one dollar; shipped in Morgan egg basket. Order early. Marshall Smith, Palmerston.

**WHITE** Wyandottes. Eggs, \$1.25 per setting. C. W. Beaven, Prescott, Ont.

**WHITE** Wyandotte eggs—From choice matings, \$1.50 per 30 in Morgan crates. W. A. Bryant, Cairnmore, Ont.

**WHITE** ROCK eggs at \$1.50 per setting; R.C. Rhode Island Red eggs at \$2; also some choice cockerels of both breeds for sale. Howard Smith, Winona, Ont.

**WHITE** Rocks—Bl. pure white layers, \$1 per setting. O. B. Holden, Beamsville, Ontario.

**WHITE** WYANDOTTE—One grand cockerel, \$3.00, from Martin's best eggs. A. F. Post, Colpoys' Bay, Ontario.

Pleasant Valley Farm offers **WHITE WYANDOTTE EGGS** for hatching from 2 pens of grand winter layers. Large white birds. \$1.00 and \$1.50 per 15, \$4.00 and \$5.00 per 100.

**G. AMOS & SONS, Moffat, Ont.**

**Imported Indian Runner Ducks** A few choice Indian Runner Ducks and Drakes for sale. The original fawn and white strain, and very select. Also eggs for setting. Prices on application. **H. R. HARRISON, Importer and Breeder, Ridgetown, Ont.**

**We Have Farms** of all sizes and suitable for all kinds of farming in every county in Western Ontario. Send for our catalogue. **The Western Real-estate Exchange, Ltd., 78 Dundas St., London, Ont.**

**WANTED**

Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted, and Pet Stock.

**TERMS**—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

**ANGORA GOATS FOR SALE**—For particulars write S. Wiederhold, Box 193, Shakespear, Ontario.

**AGENTS OR SALESMEN WANTED**—For the best selling article on the market for farmers or fruit-growers; big profits. The Collins Mfg. Co., Toronto.

**BRITISH COLUMBIA REAL ESTATE**—Fort George, British Columbia, Grand Trunk Pacific Railway terminal. Center richest farming area. Banks, business establishments already purchasers. Lots, \$150 up; 4 cash. Farm lands also. Northern Development Co., Vancouver, B.C.

**BRITISH COLUMBIA**—Are you interested in British Columbia? Send postal for free sample copy of Vancouver Daily World, and full particulars of their great dot contest. Two premiums of \$25 a month for life are among the prizes. Send at once. The World, Vancouver, B. C.

**FRUIT LANDS**—Okanagan fruit lands grow prize-winning fruits, commanding top prices. Ten acres irrigated land assures independence and delightful home. Low prices, easy terms. Illustrated booklet. Pantton & Emsley, Vancouver, British Columbia.

**FARM TO RENT**—On Blackstone Lake, Parry Sound District; good land and buildings; will rent cheap to good tenant. For particulars apply to J. P. Weeks, Parry Sound, Ont.

**FOR SALE**—Rubber and leather belting, pulleys, shafting, hangers, iron pipe. All sizes and lengths. Write for free list and prices, stating sizes. Imperial Waste & Metal Co., 7 Queen St., Montreal.

**GOVERNMENT STANDARD SEEDS**—Red Clover, \$9.00; Mandscheur Barley, 75c.; Silver Mine, White Siberian, Scottish Chief oats, 50c.; Golden Vine Peas, \$1.00; bags extra. Ask for samples. The Caledonia Milling Co., Ltd., Caledonia, Ontario.

**IF** interested in growing strawberries send for my catalogue; it's free. Tells you how to grow them. Jno. Downham, Strathroy, Ontario.

**POSITION WANTED**—On up-to-date farm, good locality, by single young man, experienced and thoroughly reliable. Apply W. Trimming, Smithville, Ontario.

**WE** have on hand at present twenty thousand 3-in. tile and a quantity of 4-in. and 6-in., which we wish to dispose of in car-load lots. Correspondence solicited. Bechtels, Limited, Waterloo, Ont.

**For Sale: Shire Stallion** Ray Prince 7 years. Sired by Locking's Forest King. For further particulars apply to: **R. D. FERGUSON, Port Stanley, Ont.**

**Importation of Stock**

Space in the Association cars will be reserved for all stock coming from the East to B. C., providing the owners or importers make application for definite space before April 30th, to

**R. W. HODSON, Live-Stock Commissioner, Victoria, B.C.**

The B.C. Stock-breeders' and B.C. Dairy-men's Associations pay half the transportation expenses.

**Seed Potatoes!**

**EXTRA FIRST EARLY.** Victor. **FIRST EARLY.**—Express, Early Rose and Bovee. **SECOND EARLY.** Duchess of Cornwall and Ideal. **MAIN CROP.**—Windsor Castle, Eldorado, Delaware, Rural New Yorker, Carman No. 3, Goodfellow, Sir Walter Raleigh, Up-to-Date.

All from seed imported last season from England, Scotland and United States. Low prices. Address: **W. P. Niles Seedsman, WELLINGTON, ONT.**

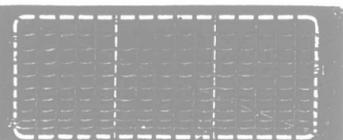
**A Wonderful Washer**



Momentum Balance, Wheel working on ball bearing, keeps the "Champion" Washing going with very little effort.

A new idea in washing machines. "Favorite" Churn means easy churning. 8 sizes. If your dealer does not handle them, write us for booklets and name of dealer near you who does.

77 **DAVID MAXWELL & SONS, - ST. MARY'S, ONT.**



**12' x 48" DRIVE AND FARM GATE \$4.25**

From factory to user, freight prepaid in old Ontario on orders of six or more. Quebec and New Brunswick, \$1.50; Maritime Provinces, \$1.65. Constructed of best material; frames 1.78 tubular steel welded. No spikes, plug or sounding at joints to break. Prices, 34 tubular, diagonal brace and filling all heavy No. 9 wire throughout. "Send on back if they're not as represented" is my guarantee. Money refunded—no argument. Order today or write for booklet. If its fence—iron or wire—write

**FENCE THE FENCE MAN** M. T. Crown Fence and Supply Co., Ltd. He saves you money—buy direct. 48

**GOSSIP. \$10,000 FOR A CANADIAN-BRED BULL.**

The spring sales of Shorthorn cattle in the United States have so far been uncommonly successful. At the eighth annual sale from the Anoka herd of E. W. Harding, of Waukesha, Wisconsin, on April 7th, 47 head made an average price of \$500, ten bulls selling for an average of \$600, and 37 females for an average of \$470.

The red two-year-old bull, Red Marshall, by Whitehall Marshall, sold for \$1,125, to R. E. Watts & Sons, of Iowa. The white yearling, Sultan Leader, sold for \$600. Two other bulls brought \$1,025 and \$1,050. The highest price for a female, \$1,375, was realized for the four-year-old Missie of Browndale 13th, purchased by H. L. Emmert, of East Selkirk, Manitoba, and the white three-year-old, Snowbird, was second highest, at \$1,025.

At Aurora, Ill., on April 8th, Thos. Stanton sold 56 head for an average of \$642, the top price of \$10,000 being realized for the roan three-year-old bull, Prince Imperial, the grand champion of the breed at the Canadian National Exhibition at Toronto, 1909; exhibited by W. A. Dryden, Brooklin, Ont.; purchased by Geo. J. Sayer, McHenry, Ill. This is the highest price ever paid for a bull of Scotch breeding, and is highly creditable to his breeders, J. McKenzie & Son, to Mr. Dryden, to Canada, and to the grand old sire, Prince Gloster, which has so long and successfully headed the Maple Shade herd. Mr. Dryden sold Prince Gloster a few months ago for the reported price of \$2,500. The advance goes to reaffirm that when E. S. breeders want a good bull, they want him badly. The average of the Stanton sale is the highest since the W. D. Platt sale at Chicago, a Canadian consignment. The highest price for a female at the Aurora sale was \$3,050, for the white two-year-old heifer, Woodfield Lovely 2nd. Sir Wm. Van Horne, East Selkirk, Manitoba, paid the second highest price, \$1,050, for the white yearling heifer, Flower Girl 3rd.

QUESTIONS AND ANSWERS.  
Miscellaneous.

WHITE SCOURS.

Please give a cure for white scours in calves in your next issue. They take bad about two days old, and only last about two or three days. Give name of disease and cure. They purge badly, and feces white and thin, like water.

A READER

Ans.—Read article in this issue on subject, "White Scours and Navel Ill."

RED AND BLACK PAINTS.

What is a good recipe for red and black paints for use on implements?

M. A. C.

Ans.—Most paints are commonly made by mixing coloring powders with linseed oil, with a little turpentine or liquid drier added. There are many reds from which to choose, and any of these mixed with linseed oil will make red paint. But red lead and "Torgored red" are specially suitable for painting implements. Lampblack and oil makes a lasting and satisfactory black paint for some purposes, but what is known as "drop black," which can be got either in paste form or dry, is generally used for implements. The last coat of paint should have a little varnish mixed with it, to give a gloss and resist weather.

ORIGINAL SHORTHORN COLOR—SHORTHORN-ANGUS CROSS USUALLY HORNLESS.

1. What was the original color of the Shorthorn breed of cattle? Was not the red color introduced by crossing with the Devons?

2. Should Shorthorn cows, when bred to a well-bred Aberdeen-Angus bull, produce calves entirely free of horns?

W. R. B.

Ans.—1. The Shorthorn was a composite breed in its early origin, and, while white and roan may have been the predominating colors in early days, yet red was also present. The Studley Bull, dropped in 1737, one of the first great stock-getters of the breed of which there is record, was a red and white. There is nothing in the Shorthorn history to show that red was introduced by crossing with Devons.

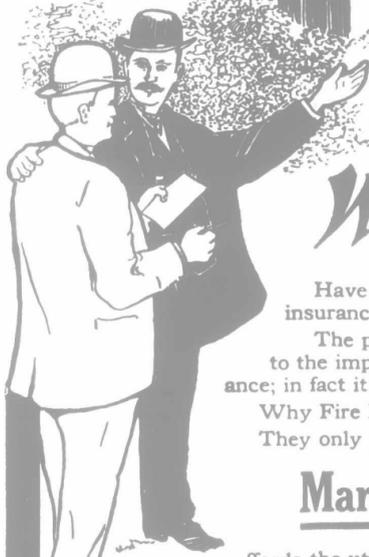
2. The calves of Shorthorn cows bred to a pure-bred Aberdeen-Angus bull are generally, but not always, without horns.

ALFALFA ON SANDY HILL.

We have on our farm a hill that is hard to cultivate, and too far from home to draw manure. This is a sandy hill, is well covered with snow during winter, and, in fact, there is snow there at present. Would you advise sowing alfalfa? If so, what time does it want to be sown, amount of seed per acre, amount of manure per acre, if any? Kindly give me full particulars; and do all feed men handle alfalfa seed?

E. P. S.

Compton Co., Que.  
Ans.—It would appear to be a wise venture to sow alfalfa on this hill, assuming that it is not springy. Sow moderately early, after the land is in good condition to work, providing it is now clean. In that case, do not manure unless quite satisfied the manure is free of weed seeds. If the land is now in sod, better plow this spring, work down well, and sow in June or July. If this plan were adopted, manure at the rate of ten tons per acre could be applied as a top dressing, and weed growth destroyed by frequent cultivation. Apply thirty bushels per acre of air-slaked lime just before sowing the seed, and, if you can spare them, about the same quantity of wood ashes. Inoculate the seed according to directions with nitro-culture, obtained from the Agricultural College, at Guelph, Ont., or Truro, N. S. Cover the seed fairly well. Some disk it in, but we prefer harrowing or sowing in front of drill tubes. Sow 20 pounds of first-class seed per acre, either alone or with a bushel of barley per acre. If your local seed store does not keep the seed, order from firms of seedmen advertising in "The Farmer's Advocate." If the field is too far from the buildings, it might be better to seed it to permanent pasture with the Zavitz mixture repeatedly recommended in these columns.



Why Insurance?

Have you ever considered "Painting" from the standpoint of an insurance policy?

The premium represented by the cost of painting is in proportion to the importance of the security afforded, no higher than other insurance; in fact it is considerably smaller, and soon becomes a minus quantity.

Why Fire Insurance—Tornado Insurance—Lightning-rods?

They only protect when that which you wish to avert, happens.

Martin-Senour Paint 100% Pure

affords the utmost protection, insures your property, beginning with its application. It wards off the sun dogs of Old Sol, the nips of Old Jack Frost—the ravages of Old Father Time.

Prevents dry rot—checks deterioration. No safer, surer or more reliable insurance could be offered.

If your dealer cannot supply you, notify us and we will gladly direct you to where our paints are to be had.

Decline All Substitutes

Write for illustrated booklet, "Home Beautiful," and interesting color card. Free for the asking.

The Martin-Senour Co., (Limited) Montreal  
Pioneers Pure Paint



"Monarch" — THE MOST MODERN STRAIGHT-STAY FENCE

The most modern fence machinery in the Dominion makes the Monarch Stiff-Stay Fence. This machinery is blessed with almost human intelligence. It produces a fence just as you would build it yourself. It makes the "Monarch" with every strand of even length. Positively no short or long wires in the Monarch. And

every stay stands perfectly plumb when fence is stretched up. Thanks to this machinery, the Monarch lock is applied without requiring the strand or stay wires to be unduly kinked. But the whole story of the Monarch superiority cannot be told in this space, so write for catalogue giving complete details.

THE SAFE-LOCK FENCE

Is built on similar lines to the "Dillon," except that the lock is positive; cannot slip or get apart, and the strand wires are left absolutely straight (excepting for the usual coil), therefore are 200 pounds stronger than any ordinary fence strands.

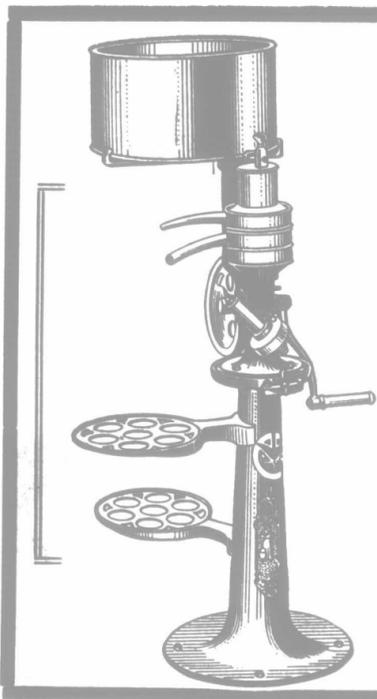
The accompanying illustration shows the lock in detail and explains why the strands are left perfectly straight and still the lock cannot slip. Hard wire only used in strands, stays and locks.



If you're a Hustler, write us.

We've a fence-agency proposition we would like to submit to you. No other fence concern has a line equal to the Monarch and Safe-Lock combination.

THE OWEN SOUND WIRE FENCE CO., Limited, Owen Sound, Ont.



### The CAPITAL is the Cream Separator that will "Buy Itself" For You.

As soon as you have read this advertisement, sit down and write a post card for The Capital book—the book that not only tells the story of the easy-running, cream-saving separator, but that tells how you can put The Capital in your own dairy practically without costing you a cent.

The book also tells all about the wonderful Capital gears, about their perfect meshing and non-wearing qualities—how they run in oil—how an automatic clutch stops them running the minute you let go of the handle—and about how they give the light, three-and-a-half-pound bowl, 7,000 revolutions a minute.

It tells how and why The Capital skims closer—why The Capital wastes less than one-fifth the cream that other separators waste—and then explains how the machine can be made sweet and clean in two minutes after you are through using it.

This book is full of hard-and-fast facts—separator facts—which every dairyman owes it to himself to know; facts which will prove a revelation to the dairyman who is not familiar with The Capital.

Write for the book to-day—NOW.

**THE NATIONAL MFG. CO., LIMITED.**  
 Head Office: Ottawa. Factories: Ottawa and Brockville.  
 Branch Offices:—Regina, Sask.; Edmonton, Alta.; Moncton, N.B.

#### QUESTIONS AND ANSWERS. Miscellaneous.

##### CONSTRUING A WILL.

A makes will as follows: Leaves farm to B, who is to pay C and D \$700 each. Remainder of property to be sold and divided between B, C and D, also cash that may be in bank. Before A dies, he sells farm left to B, and deposits money received in bank. Is B entitled to price received for farm after deducting \$700 each to B and C, or will all the money have to be divided between B, C and D? If the money is equally divided, B will receive less than half of what he would have got if farm had not been sold. K. Ontario.

Ans.—We think that all the money, including the proceeds of the sale of the farm and of the rest of the property, will have to be divided equally between B, C and D, unless they agree to a different division of it.

##### PLASTERING OUTSIDE OF FRAME HOUSE.

I have a frame house which is very cold. The stone foundation is not projected out for brick veneering or cementing. How would lathing the outside and plastering it with cement, lime and sand do, and what proportions of cement, lime and sand to use? I. C.

Ans.—The outside plastering that you suggest as a means of improving the warmth of frame house is not so much used now as formerly. It would probably serve your purpose very well for a time. Ordinary hair plaster has commonly been used for such work, but a practical plasterer informs us that if cement of an equal quantity with gray lime were used in making such hair plaster, its durability for outside work would be much increased. A finishing coat of cement and sand should be added.

##### GOSSIP.

E. Dymont, Copetown, Ont., writes: Our sales of ponies have been better for the past season than ever before, but owing to shortage of pasture, from the failure of the clover catch of last summer, we have still a few more to dispose of at right prices. Among the lot, a few we mention as follows: A spotted sorrel and white gelding, two years old, about 10 hands; a piebald mare, five years old, about 13 hands; a pair of bay geldings, two years old, about 12½ hands; a bay gelding about 12½ hands, two years old. This is an imported Welsh Cob, and of splendid quality. A brown gelding three years old, and about 12 hands. These are all broken to harness and reliable. We can also supply a few stallions of good breeding and good conformation. Will heartily welcome all who can call and see for themselves, and cheerfully answer all mail correspondence. Pony rigs and harness are also in our line.

##### FAIRVIEW SHROPSHIRE.

J. & D. J. Campbell, of Fairview Farm, Woodville, Ont., in again presenting their offerings of Shropshire sheep to our readers in their advertising space, report that their flock has wintered nicely, lambs having dropped good and strong in full numbers, as an illustration will show. Three lambs in 1908, four in 1909, and again three this season, all good ones, and not a cull in the lot, within twenty-four months, is a pretty good record for a ewe. One of the four last year, a ram, was winner of firsts at Toronto, London, and the Chicago International. At the latter, he, with his three mates, won twice in pens, and followed that by winning the \$250 Pettifer Challenge Cup. Quite a number of orders for 1910 ram lambs have already been booked.

"The wonderfully good results obtained year after year in breeding the daughters of one grand champion ram to our other champion," they add, "and behind that the best foundation stock of ewes, which twenty-five years' experience enabled us to select and retain, is one reason why breeders on each side of the line want flock-headers so bred, full of quality, and of the very best lines of breeding."

**HOMESEEKERS' EXCURSIONS TO WESTERN CANADA**  
 LOW ROUND TRIP RATES

**GOING DATES**  
 Apr. 4, 19      June 14, 23      Aug. 8, 23  
 May 8, 17, 31      July 12, 26      Sept. 6, 20

**THROUGH SPECIAL TRAINS TORONTO TO WINNIPEG AND WEST**  
 Leave Toronto 2.00 p.m. on above days

Through First and Second Class Coaches, Colonist and Tourist Sleepers.  
 Apply to nearest C.P.R. Agent or write R. L. Thompson, D.P.A., Toronto.

ASK FOR HOMESEEKERS' PAMPHLET

**Waterous Portable Sawmill**

No. 0 Wooden Saw Frame, specially designed for Portable Sawmill work. Takes saws up to 52 inches diameter. Forged Steel Mandrel, 2 7/8 inches diameter. Friction feed of 4-inch paper and iron friction, set close to outer frame bearings. Substantial carriage can be returned or giggered from 5 to 10 times as fast as feeding speed. Carriage will accommodate good size logs. Star-and-carriage for rack feed is 16 feet 11 inches long; rope feed 17 feet 6 inches long. Frame extra wide, of heavy red pine stringers, edges bound with heavy iron. Log seats heavy web. Six-inch eye-beams. Knees and rack cast in one piece. Knees have 3-inch independent taper movement, and are fitted with our patent upper and lower steel hook Peel Dogs, operated by overhead single-acting ratchet networks, having large ratchet wheel. Split steel setting and holding Pawls, designed to eliminate lost motion and permit a set of 1-16 inch. Steel-set shaft 1 15-16 inches diameter and 16 feet long. Carries pinions which operate knees and is fitted with heavy cast iron hand-wheel for hand setting. Track 54 feet long. This is one of the finest Portable Sawmills made. It will pay you to send for our free catalogue, which describes it, as well as many others in detail. Drop us a card to-day.

**The Waterous Engine Works Co'y, Ltd.**  
 BRANTFORD, ONTARIO.

Send your remittances by  
**DOMINION EXPRESS MONEY ORDERS**  
 AND  
**FOREIGN DRAFTS**  
 Payable everywhere.

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 \$ 5.00 and under ..... 3c.  
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**TELEGRAPH AND CABLE.**

Issued in all stations of the Canadian Pacific Railway Co.

# Ewing's

## Seeds that Grow Dollars

Are you like the man who walked fifty miles and wore out a five-dollar pair of shoes to save one dollar railway fare? May be you wouldn't do this—you're too wise—but how about risking next fall's crop by trying to save a few cents in the price of your seeds? Is that much wiser?

Good seeds, like all other good articles, cost more than poor ones, but they never fail to repay you with good interest.

EWING'S SEEDS are just a little better than most seeds—the little that makes the extra profit.

They're not better just because we say so, but because they're grown from selected plants—the strongest, healthiest and most perfect of their kind—and reproduce accordingly.

If you want to be sure of getting good big crops, ask for EWING'S SEEDS, and be sure you get them.

If your dealer can't supply you, write to us.

OUR BIG ILLUSTRATED CATALOGUE IS A NECESSITY. SEND FOR A FREE COPY.

**WM. EWING & CO., SEEDSMEN,**  
 McGill Street, Montreal.

**AGENTS—\$33.30 A WEEK**

Why not make it? Jack Wood did it! He writes— "Hurry up 100 more—sold first lot in 2 days—best seller I ever saw." Hundreds of agents coin money—\$5.60 worth of tools for the price of one. Wonderful invention—drop forged from finest steel. Nickel Plated all over. Astonishing low price to agents—1.20 ordered by one man. Get our grand confidential proposition quick. Sample free—don't delay—experience not needed—write at once. **THOMAS MFG. CO., 2144 Wayne St., DAYTON, OHIO**

When Writing Mention This Paper.

# SEEDS

**FORESIGHT** Means PROVIDENT CARE FOR THE FUTURE.

Is it foresight to waste money on a flimsy Cream Separator because it is a little lower in price? It may skim for a short time, soon gets out of repair and is ready for the scrap heap in a year or two.

"Care for the future" means **MAGNET** Made by the Cream Separator Specialists, The **PETRIE MFG. CO., LTD., HAMILTON**



Whose great success has been attained by building this Cream Separator superior in every way to all other separators. Do not take our word for it, but compare it point by point with any or all Cream Separators, and you will find each part in the **MAGNET** stronger and better adapted for doing the work for years than the parts in any of the others.

Here are the points:

- 1st. The square gear construction.
- 2nd. The strong and rigid frame.
- 3rd. The double supported bowl. **MAGNET** Patent.
- 4th. The skimmer in one piece, takes out all foreign matter, leaving perfectly pure cream.
- 5th. Perfect skimming, the advertised capacity.
- 6th. Easy turning. Children operate it.
- 7th. Easy cleaning. Clean within five minutes.
- 8th. Change of capacity in the same stand for a few dollars.
- 9th. Perfect brake. Saves time. **MAGNET** Patent.
- 10th. Sanitary strainer, on each tank, **MAGNET** Patent.
- 11th. Safety. All parts covered.
- 12th. Skims standing on the ground or any floor.

Our **GUARANTEE** covers each and every point. Send for catalogue. Free to every Dairyman. Dept., E. under the management of a graduate, will answer all enquiries in regard to Dairying, free.

THE SQUARE GEAR AND DOUBLE SUPPORTED BOWL DOES IT STEADY AS A ROCK

Our 12 years' experience as Dairy Specialists is at your disposal. We can, and will help you.

WRITE: **THE PETRIE MANUFACTURING CO., LIMITED**  
Head Office and Factory: HAMILTON, CANADA.

Winnipeg. St. John, N. B. Regina. Vancouver. Calgary. Montreal.

QUESTIONS AND ANSWERS. Miscellaneous.

PROPOSED NEW AGRICULTURAL SOCIETY—SEEDING FAIR GROUNDS.

1. There is an Agricultural Society in our village incorporated under the Act. A neighboring town, seven miles away, applies to the minister to be incorporated also, but as this town is within twenty miles of us, they cannot, under the Act, become incorporated without first obtaining the consent of the society already formed in our town. Do you consider we would be doing our society any harm by endorsing their petition. We want to protect ourselves, at the same time we want to be fair to others?

2. Please give a good grass mixture with which to seed down our fair grounds. Z. Y. X. Ontario.

Ans.—1. If the two towns are respective centers of distinct districts, it might possibly be all right for your society to consent to the chartering of a new society in the neighboring town. But if the two societies would serve to a considerable extent, substantially the same territory, it would appear to be of the nature of supererogation to encourage or sanction the formation of a new one. Centralization is a principle that may well be encouraged, to a reasonable extent, in connection with agricultural societies.

2. Kentucky blue grass and white clover should prove satisfactory; of the former, 30 pounds per acre, and of the latter, 5 pounds.

ABATING FLY NUISANCE.

Can you tell me of anything which would prevent the flies from breeding in the barns, stables, and around the verandas of house? We have a veritable plague of flies for over two months every year. It is impossible to keep them out of house, as they settle thickly on the sides and roof of verandas, and come in in clouds whenever a door is opened. We keep 30 or 40 cows, and about a dozen horses. Horses travel past house a very great many times a day. Think there might be something to use as spray. If so, would be thankful to know what, and how and when to use it. W. P.

Ans.—Several species of fly enter our habitations in the late summer, but the most of the annoyance and danger are due to two species—the common house-fly and the biting one that is so injurious to cattle and horses in the fall. Both breed rapidly in manure heaps, and other places where fermenting or decomposing material accumulate. In hot weather, each few weeks furnishes a generation of those flies, hence it takes several figures to number the theoretically possible progeny of one pair of flies from the beginning of summer until frost closes the season.

The following are some of the warnings and directions copied from a certain Health Department's "Fly-card":

A fly in the sick-room may get its body covered with disease germs, and immediately become a distributor of the disease.

No decaying material of any kind should be allowed to accumulate, untreated.

Damp refuse, vegetable garbage, manure, privy vaults, paper waste, or any accumulation of fermenting or decomposing material, is liable in hot weather to become a breeding-place for myriads of flies unless such materials are well covered with lime, or treated with kerosene or other insecticide.

Stable manure especially should be regularly sprinkled with kerosene or other cheap insecticide.

Pour kerosene into cess-pools and mouths of house-drains.

Screen doors and windows to keep flies out.

Copious sprinkling of kerosene or Jey's liquid in an out-door privy vault has been known in repeated instances to give relief to a household plagued with flies.

On farms, the stable yard is the prolific breeding-place of the house-fly. Handling the straw-bedding and manure in such a manner that it can be conveniently and daily sprinkled with kerosene, is an effective way of abating the fly-nuisance. J. D.

A Physician's Testimony

Dr. Snow, late Senior Surgeon, Cancer Hospital, London, Eng., said:—

"Scientific nutrition like **BOVRIL** will do more to stay the ravages of any malady than a century of progress in drug treatment."

Well fortified by nourishing food, you can resist insidious or sudden attack of disease.

**BOVRIL** is a highly concentrated food. Immediately it is taken it is transformed into energy and strength. No other food so quickly stimulates and invigorates the system as

**BOVRIL**

7-11-09

You Can Do the Weekly Washing in Six Minutes

The 1900 GRAVITY WASHER cuts out labor and saves money. Does a big family washing—and wringing too—in short order. The Gravity washes a tubful spotlessly clean in six minutes. Prove it at our expense.



Any Woman Can Have a 1900 GRAVITY WASHER On 30 Days' Free Trial

Don't send one cent. Try it first at our expense—if you are responsible. We'll pay the freight. See the wonders it performs. Thousands are in use and every user

delighted. We are constantly receiving letters from hosts of satisfied customers. The 1900 Gravity is sold on small payments. Send for our fascinating FREE Book to-day. Write me personally—

F. A. C. BACH, Manager, The 1900 Washer Co., 357 Yonge Street Toronto, Ontario

The above offer is not good in Toronto or Montreal and suburbs—special arrangements made for these districts.



"ELECTRO BALM" CURES ECZEMA,

Also Piles, Burns, Scalds, Chapped Hands and Face.

Gentlemen use it after shaving. This Balm is handled by the best firms, and is highly recommended by those who have used it.

Write for Free Sample 50c. a Box at all Dealers or upon receipt of price, from THE ELECTRIC BEAN CHEMICAL CO., Ltd., OTTAWA.

7% Guaranteed

Investment Return. Principal Absolutely Safe. Established Business.

American Securities Co., Toronto.

A GREAT AYRSHIRE COW.

The beautiful and bountiful Ayrshire cow, Annie Laurie 2nd—15588—, whose portrait appears elsewhere in this issue, is a fine illustration of ideal dairy form and function. Her record of 15,134.4 lbs. milk, and 598.5 lbs. butter-fat, equivalent to 698 1/2 lbs. butter (calculated by adding one-sixth), is believed by her owner to be the largest yearly record of any Ayrshire cow yet known. She dropped a calf on March 23rd, 13 months and 20 days after commencement of test.



Now is the Time to Clear Your Land of the Stumps and Boulders Thereon

STUMPING POWDER

Result after using Stumping Powder on stump shown in our issue of April 7th.

Is just the thing to do the work quickly, very little labor and at small cost. Write:

**HAMILTON POWDER CO'Y,**

nearest office to where you reside,

Toronto, Ont. Montreal, P. Q. Victoria, B. C.

for free descriptive catalogue and prices.

**A BOON TO FARMERS**  
—a fence that won't break, and a post that won't rot.

**Standard Woven Wire Fence**

is heavy steel wire, well galvanized, and locked with the "Tie That Binds"—our exclusive invention, which being an oval loop allows a long bend in the running wire.

STANDARD STEEL FENCE POST is No. 13 gauge steel, bent at right angle, and punched so that the fence is held secure without staples.

Lots of fence facts in our book that you ought to know. Write for free copy and sample lock.

The Standard Wire Fence Co. of Woodstock Limited. Woodstock, Ont. and Brandon, Man. 15

Please Remember to Mention "The Farmer's Advocate" When Writing

## Fistula and Poll Evil



Any person, however inexperienced, can readily cure either disease with Fleming's

### Fistula and Poll Evil Cure

—even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in Fleming's Vet-Booklet Veterinary Advice.

Write us for a free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Durable bound, indexed and illustrated.

**FLEMING BROS., Chemists**  
25 Church St., Toronto, Ontario

### SAVE THE HORSE'S SPAVIN CURE.



There are no baneful and vicious features attending the use of "Save-the-Horse."

You obtain results without delays, relapses, blistered, fevered, swollen legs or permanently thickened tissue or suspended use of the horse.

**NO PROMISE OF RESULTS IMPOSSIBLE TO PERFORM OR FALSE TESTIMONIALS TO MISLEAD YOU. YOU CANNOT MISTAKE THE CERTAINTY OF ITS UNFAILING AND UNEQUALLED POWER OR THE SECURITY OF OUR CONTRACT.**

Havre de Grace, Md., Dec. 7, 1909.

Troy Chemical Co., Binghamton, N. Y.

During 1908 I had two horses go wrong, one with a "bone spavin" and a big knee.

After reading your advertisement week after week I had Mr. Fabry order for me one bottle of "Save-the-Horse" which I thought I would just simply try. I used it on both cases, following your directions. I gave them both road work until I had consumed the one bottle only, which took just two months. And to-day I shall say just one year has elapsed since the treatment, that they both are as sound as a new dollar and neither one has taken a lame step since. EDWARD T. WELSH.

\$5.00 bottle, with signed guarantee or contract. Send for copy, booklet & letters from business men & trainers on every kind of case. Permanently cures Spavin, Thoroughpins, Ringbone (except low), Curb, Splint, Capped Hock, Windpuff, Shoe Bell, Injured Tendons & all Lameness. No scar or loss of hair. Horse works as usual. Dealers or Exp. paid TROY CHEMICAL CO.—148 Van Horn St., Toronto, Ont. and Binghamton, N. Y.

# 3 1/2 %

## On Your Savings

You would accept a higher salary if it were offered to you, so why not accept our offer to pay you 3 1/2% interest on your savings instead of usual 3%? Our \$2,000,000 assets is your Security.

**Agricultural Savings & Loan Co.,**  
109 Dundas St., London, Ont.

When Writing Mention This Paper.

### QUESTIONS AND ANSWERS. Miscellaneous.

#### SEEDING HARD SPOTS IN PASTURE—SICK FOWLS—DEPT. OF AGRICULTURE LETTERS FREE—EGGS BY MAIL.

1. Have a field which is cut up by creek and swale. It has been in sod for over 30 years, and been used entirely for pasture. The high land, which is heavy clay, produces little or nothing. I have been advised to sow Brome grass on it. Would it do, or what would you advise? Would rather not plow it, if any other method would answer.

2. Had a hen die and another taken sick. They mope around and turn black in comb. Have free range; are fed oats, barley and buckwheat. I gave the last one a teaspoonful of castor oil when I first noticed the symptoms, and it has, apparently, got better. Could you tell what would be the disease, and cause?

3. In writing to Department of Agriculture, Ottawa, for blank forms to keep milk records or anything else, is it necessary to use a postage stamp?

4. In sending for eggs for hatching, can they be sent by mail, or must they come by express?

Ans.—1. It is difficult to advise in this case without seeing the field. The best thing to grow on these high spots is alfalfa, but you may have considerable difficulty in getting a catch. Just by way of experiment, try disking a part of it up well—we infer that it is now pretty bare—and sow thirty pounds of first-class alfalfa seed per acre, disking or harrowing the seed in. Then cover with a light top-dressing of clean manure, applied, preferably, with a spreader. If you cannot get a catch of alfalfa, try a small patch of sweet clover. Cattle can be taught to eat this, and it makes tolerably good feed, despite the popular prejudice against it as a weed. If it does nothing else, it will improve the land, and may subsequently be plowed up and succeeded by a seeding of alfalfa, for which it will plentifully inoculate the soil. We are convinced that, for bare clay hills, where nothing else can be made to grow, sweet clover has a decided utility as a crop, and more particularly as a soil renovator.

2. The symptoms given point to congestion of the liver as the trouble with the hens. Many causes are assigned for this affection, one authority being of the opinion that any disease of crop, gizzard or bowels that obstructs circulation, may induce it. Overfeeding, especially of fat-producing or stimulating foods, is believed to be responsible for the trouble generally.

Feeding light and bulky foods, compelling exercise and giving purgatives, is advised. Your administration of castor oil was quite correct.

3. All letters addressed to the Department of Agriculture at Ottawa, go free of postage.

4. The post-office authorities say that there is nothing to hinder eggs being sent by mail, provided they are packed first in a watertight case, and that, again enclosed in a strong, wooden box, with elastic material between. It would be wiser to have them sent by express, however, as mail matter gets thrown around roughly.

## PAINT TESTIMONY



When you paint this spring let this testimony help you. All over this broad Canada are thousands of customers holding up high with gratitude the old reliable brand of

## RAMSAYS PAINTS

guaranteed to preserve, to protect, to beautify, never to peel, crack or chalk, always living for the lifetime of pure paints and always sold at the right price. Ask about them, and write us for Booklet AB free, a handsome Booklet on house painting. You should have it.

**A. RAMSAY & SON CO.,**  
THE PAINT MAKERS - - Montreal.  
Est'd. 1842.

### Anti-Trust Prices Freight Prepaid To You—No Duty on FARM and TOWN

#### Telephones and Switchboards

Poles, Wire, Brackets, Insulators, Tools, Lightning Arresters, Ground Rods, Batteries, Insulated Wire, and everything necessary.

**NO CHARGE** for our experts' letters of advice, drawings, explanations, instructions, telling you in any language, non-technical, just how to build, own and operate your rural, town or long distance lines in a good but economical way and at a profit, thereby getting your own telephone free.

We are the largest, exclusive and the only bona-fide Independent Telephone and Switchboard makers in Canada or Great Britain.

Our Telephones are extensively used in Canada, England, France and by the U. S. Government.

Our great illustrated book on the Telephone sent Free to anyone writing us about any new Telephone lines or systems being talked of or organized.

We have a splendid money-making proposition for good agents.

**The Dominion Telephone Mfg Co., Ltd. Dept. C, Waterford, Ont., Canada.**

**THIS IS THE SHEET METAL AGE.**

Lightning, wind, rain or snow have no effect on a "Galt" Steel Shingled Roof.

Lightning just glides off our steel roof, follows down the conductors and disappears into the ground.

The continuous, overlapping, interlocking top joint and the Galt-proof, closed-end, side-lock afford no opening for the wind—and entirely prevent water or snow from being blown through the joints—one of the weaknesses of other shingles.

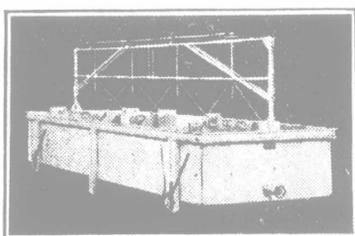
"Galt" Shingles make twice as secure a roof, because they are the only locked shingle nailed on two sides.

Handsomest and easiest and quickest laid shingle on the market.

Catalog "B-3" tells about them.

**THE GALT ART METAL CO., LIMITED, GALT, ONT.**  
Sales and Distributing Agents: Dunn Bros., Winnipeg and Regina.

# "Galt" Shingles



## Buy the PERFECT Steel Cheese Vat

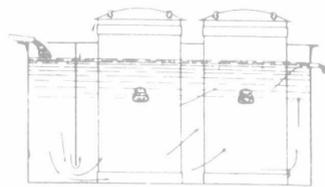
WE MAKE the best wooden cheese vats in Canada. But we advise you to buy our PERFECT Steel Cheese Vat, because no matter how good a wooden vat may be made it can never equal the PERFECT Steel Vat.

The PERFECT drains out to last drop. No cracks or corners for dirt to collect. You can keep it sweet and clean without trouble. The tin lining is 20 gauge heaviest ever used. The outside frame

is galvanized, then painted, making it absolutely rust-proof.

Get our catalogue, which fully explains the many features of our PERFECT Steel Cheese Vat, and also describes the advantages of our STEEL WHEY TANKS, which will last for twenty-five years and are the most sanitary on the market.

**The Steel Trough & Machine Co., Ltd.**  
TWEED, ONTARIO.



## Steel Tanks for Cooling Milk

THE ONLY way to make sure that your milk will not sour—the only way to make certain it will reach the factory in first-class condition—is to cool it down to at least 60 degrees immediately after milking. To enable you to do this readily we have made a steel cooling tank after Prof. Barr's drawings. It works perfectly, and the warm water is forced clean. Made in three different sizes. Write for booklet.

## Butter Whey Tanks

If you make butter from whey you will need one of our BUTTER WHEY TANKS to hold the whey until it has been run through the separator. These are made of galvanized steel in four standard sizes, or can be made any size to order.



IF INTERESTED, WRITE FOR BOOKLET.

REPEATED

## BE PREPARED FOR THE HARVEST WITH THE RIGHT MACHINE

**YOU** cannot afford to run any risk of delay at harvest time. Every minute counts when the grain is ripe for cutting. Every minute of smooth, rapid, uninterrupted work will pile up your profits. Every minute of delay due to a slow, inefficient bumbling or broken-down machine will rob you of a part of your just reward. Let the harvest find you prepared. Start today to look over your equipment. Face the question squarely.

Is it going to permit you to get all the profits from your acres. If it is not—now is the time to choose the machine that will. Because you are going to be busier every day from now on.

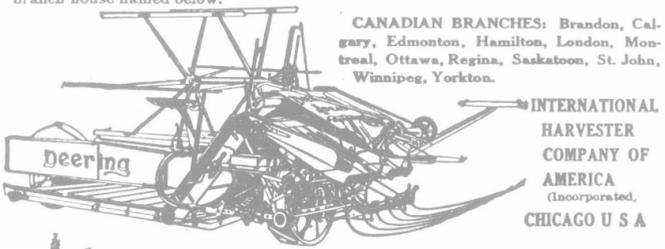
We want you to take proper time to make your selection because we know if you do you'll want a Deering. It's one of the best machines for your use. It's built to meet the conditions encountered on Canadian farms.

It will get all your grain no matter if it is tangled or down in the shortest possible time. It has strength, a wide range of adjustment for all conditions of grain and ground surface, and the draft is as light as it is possible to secure in a perfect working binder.

It is a proved machine. It has been in use for more than a generation, and its superior has never been produced. You cannot make a mistake in purchasing one. The Deering line comprises—

Harvesting Machines, Binder Twine, Mowers, Tedders, Hay Rakes and Side Delivery Rakes, Hay Loaders, Disk, Shoe and Hoe Drills, Cultivators, Seeders, Smoothing, Spring Tooth and Disk Harrows, Land Rollers, Scufflers. Deering agents also handle Gasoline Engines, Cream Separators, Hay Presses, Wagons, Sleighs and Manure Spreaders.

Call on the local agent for catalogue and particulars on any Deering machine or implement, or write the International Harvester Company of America at the nearest branch house named below:



CANADIAN BRANCHES: Brandon, Calgary, Edmonton, Hamilton, London, Montreal, Ottawa, Regina, Saskatoon, St. John, Winnipeg, Yorkton.

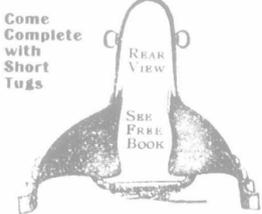
INTERNATIONAL HARVESTER COMPANY OF AMERICA (Incorporated), CHICAGO U S A



## All Horse-Collar Troubles Now Prevented or Quickly Cured

Every horse-owner who will now consider the practical in valuable time and horseflesh by using a set of HUMANE HORSE COLLARS to prevent all collar troubles, will certainly buy a set with his spring harness. Or get a set to cure your sore horses while they work. The success of the HUMANE HORSE COLLARS for the past three years proves this. Investigate.

### HUMANE HORSE COLLARS



It is a fact that only one set of HUMANE HORSE COLLARS on a farm will cure up and keep cured of collar troubles all your horses. Don't use "sweat pads"—it's cruel—especially in hot weather—injures your horses; and besides, the sweat pads cost you more than most collars before you get through. You don't need them with these collars. Every set comes complete with short tugs and ready to use—less trouble to put on and take off—and fit any horse perfectly all the time by simple adjustment. Built to last for years by expert workmen, and durable materials.

Don't think of buying your spring harness until you write or fully investigate THE HUMANE HORSE COLLARS. Get our book first.

WHIPPLE HORSE COLLAR COMPANY, LIMITED  
Hamilton, Ontario.

## CLYDESDALES AND FRENCH COACHERS

We have still on hand a few choice Clydesdale stallions—all young—that for size, style and quality will stand inspection. We have also a few Clyde fillies—imported and Canadian-bred, and two French Coach stallions. Correspondence and inspection invited. Our prices are easy and terms to suit. Phone connection.

### R. NESS & SON, HOWICK, QUEBEC.

### SMITH & RICHARDSON'S CLYDESDALES.

Black Ivory, Commodore, Royal Gretna, Pride of Newmills, Dunure Acknowledgment, Dunure Souter, Captain Vasey, Look Again, Baron Acme, and some younger ones, all sold, but a few good ones left yet, and at moderate prices. SMITH & RICHARDSON, COLUMBUS, ONT. Myrtle, C. P. R.; Brooklyn, G. T. R. Phone.

### IMPORTED CLYDESDALES AND HACKNEYS

In my stables at Ingersoll, Ont., I have always on hand Clydesdale stallions and fillies, and Hackney stallions, personally selected in Scotland for their high-class type, quality and breeding. Let me know your wants.

### W. E. BUTLER, INGERSOLL, ONT.

### ORMSBY GRANGE STOCK FARM, ORMSTOWN, P. QUE.

I have arranged to make a special importation of yearling and 2-year-old fillies this spring for the benefit of those wishing to obtain pedigreed stock at cost price. Those wishing to co-operate with me in this, should write me at once; the saving will be about one-half of the prices charged by agents in Canada. My object is to promote Clyde breeding in Canada. Duncan McEachran

### GOSSIP.

#### ALFALFA PASTURAGE FOR HOGS.

As to the amount of pasturage or the number of hogs alfalfa will carry per acre without injury to the crop, the estimates given by farmers vary considerably, depending on the kind of soil, the fertility of the land, and the size of the hogs pastured. The following, however, is a safe estimate as given by conservative men who have had much experience. River-valley and creek-bottom land, well set in alfalfa, will carry from 15 to 20 head per acre of 50- to 125-lb. hogs. Upland of fair average fertility will support from 8 to 10 head of the same kind of hogs. There are fields that have supported 25 head per acre through the season for a number of years, and are still in good condition, and there are other fields that will not furnish pasture for more than five head per acre. But these are extremes. When a field is only used for pasture, it is better to divide it into several lots, and move the hogs from one to the other as occasion requires.—From Coburn's "Swine in America."

#### WINNIPEG PRIZE LIST.

At a meeting of the Prize-list Committee of the Winnipeg Industrial Exhibition held recently, a revision of the list resulted in many changes in the horse sections.

The class for Canadian-bred Clydesdales was extended, providing classification as follows: Stallion three years old, \$25, \$15, \$10; stallion, two years old, \$25, \$15, \$10; brood mare, with foal by side, \$25, \$15, \$10; three-year-old filly, \$20, \$12, \$8; two-year-old filly, \$20, \$12, \$8.

A third prize of \$10 was added to the two-year-old stallion and brood mare, with foal by side, in the Percheron class.

For 1910, geldings will not be allowed to show in the breeding classes of Standard-breds and Hackneys. Instead, provision has been made for a class for horses of the roadster type, and also one for horses of the carriage type, with the following classification: Filly or gelding, three years old, \$20, \$15; filly or gelding, two years old, \$15, \$10; filly or gelding, one year old, \$12, \$8; brood mare, with foal, \$20; foal of 1909, \$10, \$6.

A section was provided for Hackney stallions, to be shown in an appropriate vehicle, \$25, \$15.

The special prize for the best five light horses, any age, sex or breed, was changed to read three horses.

The class for draft horses was divided into heavy draft for 1,600 lbs. or over, and light draft or agricultural, 1,150 to 1,350 lbs.

Revisions were also made in the cattle and other classes. The principal change was the addition of a class for Short-horns, limiting the competition to Western Canada.

In the beef classes, the section for cow and two of her progeny was made to read, "two animals the progeny of one cow."

The prizes for Holstein cows were increased to the following: Section 7, \$25, \$20, \$15, \$10, \$5. Section 8, \$20, \$15, \$10, \$5. Section 9, \$15, \$10, \$5, \$3. Section 10, \$30, \$20, \$15. Section 15, \$15, \$10, \$5.

In the sheep classes, extra money was added to the third and fourth prizes, in the classes in which the competition has been keen. A class was provided for Suffolks and Hampshire Downs. Several communications had been received from breeders of Poland-Chinas, requesting a class for this breed of pigs, and to their request the association added a class this year.

### TRADE TOPIC.

Lighting the farm home and stables by electricity by the use of a gasoline engine has been proven practicable, and at a moderate cost, as indicated in the advertisement of the Canadian Fairbanks Co. The engine may also be used for general farm power during the day time, and serves the purpose of securing to the farm home many advantages of city life without its disadvantages. See the advertisement and write for further information.

### HORSE OWNERS! USE

**GOUBAULT'S CAUSTIC BALSAM.**  
A safe, speedy and positive cure. The safest, Best BLISTER ever used. Removes all bunches from Wounds. Impossible to produce scar or blemish. Send for descriptive circulars.  
THE LAWRENCE-WILLIAMS CO., Toronto, Can.



## Locates Lameness

Simply bathe the limbs with Tuttle's Elixir; then watch for the little water blisters. That's where your horse is lame. Where there is no lameness, the Elixir will dry out like water. The least sign of spavin, lameness, curbs, shoe boils, thrush, swellings or colic, founder or distemper should be "nipped in the bud." Do not let another day pass without getting a bottle of

## Tuttle's Elixir

It is the best horse insurance possible. A sure cure for colic and all common ailments that handicap and decrease the value of your horse.

### Best Leg and Body Wash.

Because by adding water the lotion can be made just the desired strength for the true condition of your own horse. In use in over 100,000 stables. Your dealer sells Tuttle's Elixir. If not, send us his name and 50 cents in stamps and we will send a large bottle prepaid, together with "Veterinary Experience," a book of valuable information to every horse owner. Write for that to-day, anyway, enclosing 2c. stamp for postage.

TUTTLE'S ELIXIR CO., 205 Beverly St., Boston, Mass.

## Dr. Page's English Spavin Cure

For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hock, Strains or Bruises, Thick Neck from Distemper, Ringworm on Cattle, and to remove all unnatural enlargements.

This preparation (unlike others) acts by absorption rather than blister. This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin or money refunded, and will not kill the hair. Manufactured by Dr. Frederick A. Page & Son, 7 and 9 Yorkshire Road, London, E. C. Mailed to any address upon receipt of price, \$1.00. Canadian agents:

J. A. JOHNSTON & CO., Druggists, 171 King St., E. TORONTO, ONT.

## A Treatise on the Horse, FREE

Couderay, Wis. Oct. 5th, 1909  
"Please send me your book—'A Treatise on The Horse'—I saw by your ad that it was free, but if it cost \$5, I would not be without it, as I think I have saved two valuable horses in the last year by following directions in your book."  
William Napes.  
It's free. Get a copy when you buy Kendall's Spavin Cure at your dealer's. If he should not have it, write us. 40  
Dr. B. J. Kendall Co., Enochburg Falls, Va.

## LAMENESS from a Bone Spavin, Ring Bone, Splint, Curb, Side Bone or similar trouble can be stopped with

### ABSORBINE

Full directions in pamphlet with each bottle. Does not blister or remove the hair, and the horse can be worked. \$2.00 a bottle, delivered. Horse Book 9 E Free. ABSORBINE, JR., for mankind, \$1 and \$2 a bottle. Removes Painful Swellings, Enlarged Glands, Gout, Wens, Bruises, Varicose Veins, Verruocities, Old Sores, Allaya Pain. Your druggist can supply and give reference. Will tell you more if you write. Manufactured only by W. F. YOUNG, P. D. F., 258 Temple St., Springfield, Mass. Canadian Agents: Lymans' Ltd., Montreal.

Imp. Registered Clyde Stallion for Sale —Sire Pride of Blaken, grandsire Baron's Pride; four years old this spring. Pedigree on application. Apply W. BELL, Blyth, Ont.

## Peerless Jr. Poultry Fence

**Close enough to keep chickens in. Strong enough to keep the cattle out.**

PEERLESS JUNIOR Poultry Fence will do all you wish of a poultry fence and will do much more. It is built close enough to keep the chickens in, but it is also built strong, rigid and springy. Those heavy, hard steel top and bottom wires, together with intermediate laterals, will take care of a carelessly backed wagon, or an unruly animal and spring back into perfect shape again. It is the most handsome and most effective poultry fence on the market. At every intersection the wires are firmly held together by the never-slip PEERLESS Lock.

**The Fence That Saves Expense**

because it never needs repairs. It is the cheapest to put up, too. It is stretched up like a field fence. More than half the price can be saved in posts and lumber alone, as required by some other poultry fences. Write to-day for our printed matter. It tells you how to get your full money's worth in fences. We build fences for every purpose.

**BANWELL HOXIE WIRE FENCE CO., Limited**  
Dept. B  
WINNIPEG, MAN. HAMILTON, ONT.

## Saves Expense



### UNION STOCK - YARDS Horse Exchange

WEST TORONTO, CANADA.

The Greatest Wholesale and Retail Horse Commission Market.

Auction sales of Horses, Carriages, Harness, etc., every Monday and Wednesday. Horses and harness on hand for private sale every day.

The largest, best equipped and most sanitary stables in Canada. Half-mile of railway loading chutes at stable door. Quarter-mile open track for showing horses. Northwest trade a specialty. **HERBERT SMITH, Manager.** (Late Grand's Repository.)



## 20 Imp. Percheron Stallions 20

Our 1909 importation of 20 Percheron stallions, from 1 to 5 years of age, are now in our stables. Up to over a ton in weight. Big, stylish, choke-full of flashy quality, and faultless movers. Prizewinners among them. The best lot ever imported to Canada. All are for sale on terms to suit.

**HAMILTON & HAWTHORNE,**  
Simcoe, - - - - - Ontario.



### Maher's Horse Exchange

16 to 28 Hayden Street TORONTO  
(Near cor. Yonge and Bloor)

AUCTION SALES of Horses, Carriages, Harness, etc., every MONDAY and THURSDAY at 11 a.m. PRIVATE SALES every day. We have always a large quantity of horses on hand for Auction or Private Sale. We have the biggest and best sale ring and stables in Canada. We hitch and try all horses for out-of-town buyers, and guarantee satisfaction. WE SELL STRICTLY ON COMMISSION.

**P. MAHER, Proprietor. GEO. JACKSON, Auctioneer.**



## T. H. HASSARD'S NEW IMPORTATION!

MY NEW IMPORTATION OF

### Clydesdale Stallions and Fillies

are now in my stables at Markham, Ont., and, as usual, I have a big range for selection, of a type, breeding and quality seldom equalled, never excelled, by any previous importation. Call and see them. Phone connection. **T. H. HASSARD, Markham, Ont.**

#### CLYDESDALES AND HACKNEYS

We have still for sale several good Clydesdale Stallions; also our prizewinning Hackney Stallion, Blanch Surprise, and a few good Clydesdale and Hackney Mares. All of which will be sold on reasonable terms. Phone connection.

**JOHN A. BOAG & SON, Bayview Farm, Queensville, Ont.**

#### Imported Clydesdales

My new importation of Clydesdale stallions for 1910 have arrived. They were selected to comply with the Canadian standard, combining size, style, quality and faultless underpinning with Scotland's richest blood. They will be priced right, and on terms to suit **C. W. BARBER, GATINEAU PT., QUEBEC.**

#### CLYDESDALES, Imported and Canadian-bred.

I have on hand 2 Imported Clydesdale Stallions, one 4, the other 5 yrs. old; 2 Canadian-bred Clydesdale Stallions, one 2, the other 3 yrs. old; one French Coach Stallion, 4 yrs. old; one Shire Stallion, and the noted Hackney Stallion, Chocolate Jr. I will sell these horses cheap for quick sale. **T. D. Elliott, Bolton, Ont.**






### QUESTIONS AND ANSWERS. Veterinary.

#### SEQUEL TO SCRATCHES.

Horse had a bad attack of scratches. The cracks are all healed now, but the leg is badly marked and scruddy.

A. A.

Ans.—Scars of this kind are very hard to remove, and the hair will never grow properly again. All that can be done is to soften the scabs and scruff and rub them off. Dress three times daily with oxide-of-zinc ointment, which you will get at any drug store. Rub the ointment off before taking horse out in the dust.

V.

#### ABORTION.

Heifer, 2½ years old, aborted a month ago from no apparent reasons. The fetus was only about the size of a rat, and partly decomposed. Was this contagious abortion? No others have aborted. Would it be safe to breed her again?

A. P.

Ans.—This was not contagious abortion. The heifer was injured in some way, and the fetus died, but was not expelled for some time, and in the meantime decomposition commenced. This condition is not seen in contagious abortion. It will be reasonably safe to breed her again, and it is probable she will go to full term.

#### PARTIAL PARALYSIS.

On March 20th, cow calved at full term. I allowed calf to nurse for two days, and after that allowed it to nurse twice daily, but never emptied the udder. The fourth morning cow appeared sick, and had difficulty in rising. I sent for a veterinarian, and he said she had the first stages of milk fever, and that my theory of not milking her out is wrong, that she should have been milked perfectly dry, three times daily, from the first. He inflated the udder and gave her a purgative, but she is gradually getting worse; will not eat; she can rise better. Two quarters are dry, and the other two very hard, and producing blood and water.

J. H. F.

Ans.—It is almost incredible that a veterinarian should talk that way about milk fever. You adopted the proper preventive measures. Are you sure the man you employed is a graduate? If she had milk fever there is little doubt that some of the medicine given passed down the windpipe to the lungs and complicated matters. I am of the opinion she suffered from partial paralysis. Apply hot poultices to the udder and rub well three times daily with camphorated oil, as udder complication is present. Give her two drams each of nux vomica, gentian and ginger, three times daily, and drench her with boiled flaxseed to sustain strength. It is probable she will not recover.

V.

#### Miscellaneous.

##### DISTEMPER.

Kindly tell me what is good for horses with distemper. My horses have been troubled with it most all winter, and some have broken under the jaw. Is there anything that one could do that would prevent horses from getting it?

D. F.

Ans.—Distemper in horses is caused by infection, by direct contact with an animal having the disease, or, indirectly, through contact with the discharges from an infected animal, or by means of the atmosphere in which an infected animal has been. An animal can contract the disease only once. It may be contracted by being placed in a stall in which an infected horse has stood or been fed. Ordinary light cases require but little treatment beyond warm washes, warm coverings, moistened hay, and protection from exposure to cold. Steaming the head will allay the inflammation and ease the cough. The swelling of the glands should be promptly treated with warm water, and flaxseed poultices, and as soon as there is any evidence of the formation of matter, it should be opened. Give three drams hypsulphite of soda three times daily; flush the cavity of the abscess three times daily with a five-per-cent solution of carbolic acid, and thoroughly disinfect the stable by sweeping, and giving a coat of hot lime wash with five-per-cent carbolic acid.

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Agents coming Great Thousands being sold. Money big money getter for agents. Handy Automatic Hame Fastener. No straps—no buckles—no chains—no freezing of fingers in cold weather. A square deal offer. Horsesmen stop—look—listen—buy one—then a dozen. Agent writes, "Hurry up my order—sold out first day." Cary says, "Made \$9.00 yesterday—rush order." This is only one of over 2,000 fast selling articles we furnish agents. Write today—now—for our latest proposition. Headquarters for agents. No experience needed. Just write—we show how. We want agents—crew managers—men or women—all or part time—home or traveling—to show, take orders for our goods. Write today for FREE SAMPLE. You will make more money than ever before. Costs nothing to investigate—write at once—drop everything else—act quick—time short—let us start you—demand is big—be a Thomas Agent and get the money.

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### Artificial MARE IMPREGNATORS

We GUARANTEE you can get from 2 to 6 mares in foal from one service of stallion or jack. Increase the profits from your breeding stables by using these Impregnators. No experience necessary to use them successfully. Prices, \$3.00 to \$5.00 each prepaid.

Popular SAFETY IMPREGNATING OUTFIT, especially recommended for impregnating so-called barren and irregular breeding mares, \$7.50 prepaid.

Write for CATALOGUE which illustrates and describes our Impregnating Devices, Breeding Hobble, Stallion Brides, Shields, Supports, Service Books, Etc.

**CRITTENDEN & CO., Dept. 38, Cleveland Ohio, U.S.A.**

## Increase Your Profits

### Clydesdales and Percherons



To my many friends, and the public generally, I wish to say that in my stables at Weston, Ont., I have my 1909 importation of 10 Clydesdale and 8 Percheron stallions; a lot that for true draft character, faultless underpinning, choice quality and breeding were never surpassed. Terms to suit and prices right.

**J. B. HOGATE,**  
Weston, Ont., and  
Brandon, Man.  
W. D. COLBY, Mgr.  
Weston, Ont.

## Don't Have a Blind One

Wonderful Discovery

### "VISIO"



MOON BLINDNESS and all Diseases of the Eye successfully treated with this NEW REMEDY.

Money Back if it fails to cure. \$2.00 per bottle postpaid on receipt of price.

Visio Remedy Ass'n, Dept. #, 1933 Wabash Av., Chicago, Ill.

### Bawden & Mossip, St. Mary's, Ont.

New importation of Clydesdale, Shire and Hackney Stallions, all of which are for sale at reasonable prices. The Clydesdales comprise such horses as King's Friendship (14274), by Hiawatha Godolphin, by Hiawatha; King's Lynn (14204), by Acme, by Baron's Pride; King's Model (14206), by Sir Hugo, by Sir Everard; Hector (11321), by Murchison, by McGregor; Coyneche (11314), by Bacon Macgregor, by McGregor. Write, or come and see **WM. MOSSIP, St. Mary's, Ont.** Phone connection.

## HIGHLY-BRED CLYDESDALES

FOR SALE

Always on hand, stallions, colts, mares and fillies. The champion stallion, "Baron Howes" (13847), was purchased from this stud. Apply:

**JOHN R. BEATTIE,**  
Baurch Farm, Annan, Scotland.

### MESSRS. HICKMAN & SCRUBY

Court Lodge, Egerton, Kent England.

Export pedigree live stock of every description. Owing to rapid increase in business, Mr. L. C. Scruby has been taken into partnership. During the spring months the export of horses will be a specialty. We are at this business all the year round, and can do better for you than you can do for yourself, even if you do come over to do your own business. Send us your orders, and we will do the best we can for you. Nobody can do more.

### For Sale: REGISTERED HACKNEY

STALLION, COCK ROBIN.

Three years old; 15½ hands; chestnut; hind feet white. Sire Commodore 3rd, imp., (6695), by Chocolate Jr. (4185). Dam Ada Adair (181), by Robin Adair 2nd, imp., (3907). For description, terms, etc., address: **G. W. CLEMONS, ST. GEORGE, ONT.**

### High-class Driving Ponies

AND OUTFITS.

Twelve ponies, ranging in height from 10 hands to 13 hands, and of bay, brown, sorrel, black and piebald colors, and from 2 to 5 years of age. For prices and particulars write:

**E. Dymont, Copetown, Wentworth Co., Ont.**

**Trinidad Lake Asphalt**  
is the natural proven waterproofer. Its use in streets and roofs for over thirty years has shown it to be a mighty storm-defier and weather-resister.

## Genasco Ready Roofing

is made of Trinidad Lake asphalt. It has life, resistance, and endurance that prevents cracks, breaks, and leaks. You can't afford to guess or run risks. You want the roofing that proves it is proof.

Ask your dealer for Genasco. Mineral or smooth surface. Don't go by the looks of roofing; insist on the hemisphere trade-mark. A written guarantee—if you want it. Write for samples and the Good Roof Guide Book.

**THE BARBER ASPHALT PAVING COMPANY**  
Largest producers of asphalt, and largest manufacturers of ready roofing in the world.



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Trinidad Lake Asphalt  
Asphalt saturated Wool felt  
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## CALF FOOD

**BIBBY'S CREAM EQUIVALENT MEAL**

added to water, half a pound to six quarts, makes a gruel which CONTAINS ALL THE ELEMENTS of nutriment found in a like quantity OF FRESH MILK. There is no other food so fresh milk itself which contains so much nutriment for calves and young pigs. We are convinced that this is the best article of its kind and want you to use it. It is made in England by an honorable firm and you can "bank" on their word. Give it a trial.  
50 lb bags, \$2.75 100 lb. \$4.00  
Sold by Reliable Dealers Everywhere, or direct  
WM. RENNIE CO., LIMITED, TORONTO

### QUESTIONS AND ANSWERS. Miscellaneous.

#### DUTCH SETS AND TOP ONIONS.

"I had a package of top onions and Dutch sets, mixed, but could see little difference when I planted them. When I gathered them in the fall, I found some big, solid onions, which have kept perfectly until now, while others were in bunches made up of many little pieces, and had to be used right away or they would have spoiled. Was this because the latter were too deeply covered with soil, or was one kind from the top onions and the other from the Dutch sets?"

Ans.—The onions which produced a large number of small ones in the clump instead of a solid bulb are the top onions. The good bulbs are from the Dutch sets. Top onions are planted for use when green, and do not form large, solid bulbs. Bulblets are formed on the stalk above the ground, from which they get the name of top onions.

W. T. MACOUN.

#### A NUISANCE.

1. How far away should a hogpen, that keeps from 80 to 125 hogs during the summer season, be from a creamery or butter factory, so that the odor from hogpen will not affect factory?

2. Can you give the name of the Government Inspector for Cheese and Butter Factories in the County of Bruce, and his address, or the district which takes in Bruce County?

3. Can a company running a butter factory, run a hogpen in a community when the odor from it is annoying a number of people living around it, and is a danger to the health of those people?

Ontario. A RATEPAYER.  
Ans.—1. Pretty hard to say. Much would depend on the condition in which the swine were kept, and other matters. We would not care to risk them much closer than forty rods.

2. The creamery instructor for the district in which Bruce County is situated is M. Robertson, St. Mary's, Ont. The cheese instructor is Jas. Burgess, of Listowel, Ont.

3. If it can be fully established in evidence that the case is as serious as it is stated to be, the company can be prosecuted for maintaining a nuisance; or a writ might be issued against them, claiming an injunction against their continuing the obnoxious industry.

#### THE SPRUCE GALL-LOUSE.

I am sending you a sample of the diseased branches of our little evergreen trees. Do you know what is the cause, and whether there is any cure? The trees look sickly, and are covered with those little black knots.

Ans.—This is the spruce gall-louse (Chermes abietis). It has been the cause of considerable anxiety among growers of ornamental spruces for some years, extending its range year by year, though, in the older sections, the parasites are apparently keeping it in check. It undoubtedly renders the trees very unsightly, and gives them an unhealthy appearance, but we know of no actual instance where it has killed trees.

The young issue from the cone-like galls about the middle of August, and crawl about on the trees, where, later, eggs are laid, from which hatch young plant lice that remain on the twigs until the following spring. Their presence in the young buds of the spruces causes slight swellings at the base of the leaves. Each female of the May brood lays about 300 eggs, and the young from these cluster in the swellings begun by their mothers, where they soon cause the galls which later are so conspicuous. No treatment is possible upon forest trees, but upon hedges and ornamental specimen trees, good work has been done by spraying them at the times the young plant lice are exposed, and before they are enclosed in the galls, with a tobacco and soap wash, or with kerosene emulsion. The two seasons of the year when the young plant lice may be reached are in the latter part of August and in May. A good soap wash may be made by soaking ten pounds of tobacco leaves in enough hot water to cover them, then strain off the liquid and add two pounds of whale-oil soap. When dissolved, dilute to forty gallons of water. Two or three applications of this spray should be made at short intervals.

## Could Not Sleep In The Dark.

**Doctor Said Heart and Nerves Were Responsible.**

There is many a man and woman tossing night after night upon a sleepless bed. Their eyes do not close in the sweet and refreshing repose that comes to those whose heart and nerves are right. Some constitutional disturbance, worry or disease has so debilitated and irritated the nervous system, that it cannot be quieted.

Mrs. Calvin Stark, Rosmore, Ont., writes:—"About two years ago I began to be troubled with a smothering sensation at night, when I would lie down. I got so bad I could not sleep in the dark, and would have to sit up and rub my limbs, they would become so numb. My doctor said my heart and nerves were responsible. I saw Milburn's Heart and Nerve Pills advertised and got a box to try them. I took three boxes and can now lie down and sleep without the light burning and can rest well. I can recommend them highly to all nervous and run down women."

Price 50 cents per box or 3 for \$1.25 at all dealers, or mailed direct on receipt of price, by the T. Milburn Co., Limited, Toronto, Ont.

**MIDDLEBROOK**  
**Aberdeen-Angus**  
Surplus cattle all sold.  
**John Lowe, Elora, Ont.**  
P. O. and Station.

**HOMESTEAD ABERDEEN-ANGUS**  
Two extra good bull calves left, 9 and 11 months old; also females, all ages. Will be priced low to sell this month.  
**WM. ISCHE, Sebringville, Ont.**  
Long-distance Phone.

**FOR SALE: SOME NICE YOUNG**  
**Aberdeen-Angus Bulls**  
and some females of all ages. Also a first-class Clydesdale stallion. **J. W. Burt, Coningsby, Ont.**

**ABERDEEN - ANGUS**  
Will sell both sexes; fair prices. Come and see them before buying. Drumbo station.  
**WALTER HALL, Washington, Ont.**

"Who can mention one leading fact about the Epistles?" asked the Sunday-school teacher, looking over the class. Johnny's hand went up. "Well, Johnny?" "They were the wives of the Apostles."

## FINDS HIS WORK A PLEASURE NOW

**Dodd's Kidney Pills Cured the Postmaster's Kidney Disease.**

**Alberta man tells how his troubles vanished when he used the old reliable Kidney Remedy.**

Scona, Alta., April 18.—(Special).—"I can now do all my work without pain, and with pleasure." Those are the words of Postmaster Andrew B. Nelson, of this place. As all the postmaster's friends know, he has been troubled with Kidney Disease for several years past, and has been doing everything in his power to find a cure for it. He has found the cure. It is Dodd's Kidney Pills. "Yes, I tried all kinds of medicines for my kidney trouble," the postmaster joyfully states. "None of them seemed to do me any good till I commenced to use Dodd's Kidney Pills. Two boxes of them cured me completely. I highly recommend Dodd's Kidney Pills to all sufferers from Kidney Disease. I would not be without them."

Dodd's Kidney Pills cure all diseases of the kidneys, from Backache to Bright's Disease. They also cure all diseases caused by disordered kidneys failing to strain the impurities out of the blood. That's why they cure Dropsy, Rheumatism, and Heart Disease. If you haven't tried them yourself, ask your neighbors about them.

## Dispersion Sale of Shorthorn Cattle!

The property of T. L. Pardo & Son, three miles west of Cedar Springs, Ont., one of the oldest-established herds in Western Ontario. Positively no reserve. On

**TUESDAY, MAY 3RD, 1910**

Consisting of the entire herd of 23 females and 8 bulls. Several imported, and nearly all from imported sire and dam. The foundation stock for this herd were selected from the very best herds of Scotland and Canada, with a strong view to milking qualities. Electric cars connect with all M. C. R. and P. M. trains, and will be met at Cedar Springs. Terms: Six months' credit will be given on bankable paper, or a discount of 6 per cent. per annum for cash. Lunch at noon. Sale to commence at 1 o'clock. Catalogue on application.

**T. L. PARDO & SON,**  
Capt. T. E. Robson, Auctioneers.  
McCole & Harrington, }  
CFDAR SPRINGS, ONTARIO



Unlike wooden and other wheels,  
**Dominion Low Wide-tire Steel Wheels**

evenly distribute strain, like bicycle wheels. Lighter, cheaper and stronger than wooden wheels. Guaranteed not to break in rough roads or coldest weather. Can be taken apart and repaired. Fit any axle. Last a lifetime. Save money, time, labor, roads and horses.

Use a **DOMINION HANDY WAGON** and save time, money, labor. Low, convenient, saves cost in year. Wide tires save roads; make hauling easy. Changed to platform wagon in few minutes. One man does work of two. Write now for free catalogue.



**DOMINION WROUGHT IRON WHEEL CO. LTD., ORILLIA, ONT.**

## CLYDESDALES and HACKNEYS

We have for sale a few choice Clydesdale mares, imported and Canadian-bred; also some Canadian-bred Clydesdale stallions. Hackney stallions and mares for sale always. Long-distance phone. **Hodgkinson & Tisdale, Beaverton, Ont.** G. T. R. and C. N. R.

### IMPORTED CLYDESDALE FILLIES

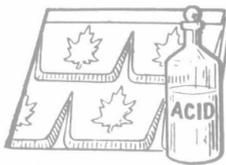
I have still on hand six Clydesdale fillies. They are big, smooth fillies, exceptionally well bred, and their underpinning is the kind Canadians like. I have only one stallion left, a right good one. My prices are as low as any man's in the business. Phone connection.  
**GEO. G. STEWART, HOWICK, QUEBEC.**

### Imported Clydesdales

My first importation for 1910 has just arrived. Stallions up to a ton in weight, from 1 to 5 years of age. Draft character and faultless underpinning are a predominating feature. Also a few big choice fillies 2 and 3 years of age. **WM. COLQUHOUN, MITCHELL, ONT.** Phone connection.

### WAVERLY CLYDESDALES AND HACKNEYS

My 1910 importation of Clydesdale stallions and fillies, and Hackney stallions and fillies, are now in my barns. One and two-year-old Clyde fillies of a character and quality never before excelled. My Hackney stud was never so strong in high-class animals. All are for sale and prices right. **ROBT. BEITH, BOWMANVILLE, ONT.**



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The Acid  
Test Easily**

The sheet metal the British Government buys for public works must be able to pass an Acid Test more severe than twenty years of Canadian weather.

PRESTON Safe-Lock Shingles are the only shingles made and galvanized according to British Government Specifications. They easily pass this Acid Test. They are practically everlasting—the most durable roofing in the world.

PRESTON Shingles are the only shingles SAFE-LOCKED on all FOUR sides. They are proof against rain, snow, fire, lightning, and wind. Canada has not yet been visited with a gale strong enough to unroof a single building covered with PRESTON Safe-Lock Shingles.

So positive are we that PRESTON Shingles are lightning proof that we

Queen Street Factory. Please send your booklet, "Truth About Roofing." I am interested in roofing and would like complete information about PRESTON Shingles.

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P.O. Address \_\_\_\_\_  
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will give you a Lightning Guarantee Free of Charge. And with PRESTON Shingles you can reduce your fire insurance rate by about one-half.

While the first cost is about \$1.00 more per 100 square feet, PRESTON Shingles are five times as durable as prepared roofing or wooden shingles. The cost per year of service of PRESTON Shingles is only one-fourth to one-third as much. PRESTON Shingles are the only roofing material good enough for that new barn of yours.

# PRESTON SAFE-LOCK SHINGLES

Our new and improved edition of "Truth About Roofing" contains important facts about different kinds of roofing materials. You would be willing to pay for this information if you had an idea how valuable it is. However, we will send you a copy free, provided you fill in and send the coupon to us by return mail.

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### GOSSIP.

#### FAIRVIEW HOLSTEIN-FRIESIAN HERD.

E. H. Dollar, Heuvelton, N. Y., writes: Some time ago I wrote you, giving you a short sketch of the breeding of the sires heading Fairview herd of Holsteins, and I thought it might interest your readers to know something of the females we have here. I have noticed that during the past two or three years a great many Canadian breeders are coming to this State for their sires; in fact, it has been our privilege to furnish a considerable number of these sires from this herd, and I believe these breeders securing sons of Pontiac Korndyke or Rag Apple Korndyke to place at the head of their herds have been fortunate. Pontiac Korndyke is the only living sire of the breed having four 30-lb. daughters; he having sired Pontiac Rag Apple, 31.62 lbs. in seven days; Pontiac Queen Korndyke, 31.01 lbs. in seven days; Pontiac Clothilde De Kol 2nd, 31.27 lbs. in seven days, and Pontiac Pet, 30.07 lbs. in seven days. He also is sire of Lady Korndyke Pauline De Kol, 29.14 lbs. in seven days, and Pontiac Agnes, 29 lbs. in seven days. These cows, with the exception of Pontiac Clothilde De Kol 2nd, have all made their records here, are all owned by us, and remain in our herd yet, with the exception of Pontiac Rag Apple, whom we sold as a four-year-old to D. W. Field, Brockton, Mass., for \$8,000, the highest price ever paid for a cow of the breed. In addition to these 29- and 30-lb. cows, we have a considerable number of daughters of Pontiac Korndyke, with large two- and three-year-old records, some of them, we believe, good candidates for 30-lb. records at maturity. Among these are Pontiac Darkness, 26.40 lbs. in seven days, at four years old; Pontiac Agnes Korndyke, 20.06 lbs. in seven days, as a two-year-old; Sadie Vail Korndyke, 20.76 lbs. in seven days, as a 2-year-old; Fairview Mable Korndyke, 24 lbs. in seven days, as a junior three-year-old. This heifer is now in test, and is gaining every milking, and we believe she will make at least 26 lbs. before she finishes.

I might go on and enumerate twenty or thirty other daughters of this great sire, every one of which has a large A.-R.-O. record, but I believe I have already mentioned enough to show your readers the kind of producers the daughters of Pontiac Korndyke are. In addition to these, I have a considerable number of daughters of Rag Apple Korndyke that are just beginning to come fresh, and they certainly look like large producers. The first one to freshen is now in test, and, although but a year and ten months old, she is running very close to the 15-lb. clip, and gaining each milking, and is showing an average test better than four per cent.

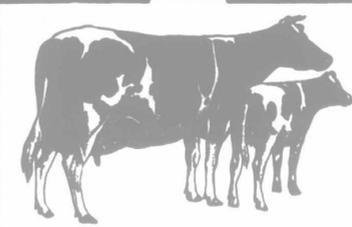
We expect great things from the daughters of this bull, and will not sell any of them from the herd until they have been tested. They are splendid individuals, and show great promise.

We also have quite a number of well-bred young bulls, sired by Pontiac Korndyke or Rag Apple Korndyke, and out of these above-mentioned cows, and others with A.-R.-O. records, and these we are offering for sale, and I believe I can say, without fear of contradiction, that no other sire of the breed has shown greater power to transmit the large-producing quality of his dam than has Pontiac Korndyke.

We cordially invite your Canadian breeders to visit Fairview and inspect our herd. We are only a short distance from Prescott. Many of your breeders could leave home in the morning, come here and look our herd over, and be home again the same night, and I feel certain that there is no breeder in the State in a position to offer a greater value in young sires than can be found here at the present time.

A small boy recently became the proud possessor of a donkey—not so handsome or so young as it might have been. However, it answered the purpose of its acquisition, which was to afford back rubs. One day when the minister was enjoying a ride when the minister of the parish met him. "Hello, sonny!" greeted the minister. "Quite a rare beast you have there." "Yes," replied the boy; "but I suppose there are a great many of 'em in the theological gardens."

### STEELE-BRIGGS SEEDS



FOR THE GOOD  
FARMER'S GOOD STOCK

### A GOOD FARM

Should Grow Good Stock, hence Should  
Never be Abused with Poor Seed.

### A GOOD FARMER

Sows the BEST SEEDS, hence a Clean  
Farm, Largest Crops, and Maximum  
Profits.

### STEELE-BRIGGS SEED CO.

HAMILTON — TORONTO — WINNIPEG

### ELM PARK ABERDEEN-ANGUS

At the largest fairs of 1909 in Eastern and Western Canada our herd won over 80 prizes, composed of championships and 1st and 2nd prizes. If you want the kind that win, either sex, write, or come and see them.

JAMES BOWMAN, Elm Park, Guelph, Ont.

### Aberdeen-Angus Cattle

7 choice Aberdeen-Angus bulls for quick sale, from 9 to 10 months.

Geo. Davis & Sons, Alton, Ont.

### Scoten Shorthorns

At Toronto Exhibition this fall yearling bulls bred by us won 1st and 3rd in class and junior champion. We also bred the sire of these bulls. The grand champion steer at Guelph was sired by a bull of our breeding. We have 10 young bulls for sale now, bred the same. Write for breeding and prices.

John Miller, Brougham P. O., Ontario.  
Claremont Stn., C. P. R., 3 miles.

### A. Edward Meyer

P. O. Box 378, Guelph, Ont.,

Breeds SCOTCH SHORTHORNS Exclusively. Twelve of the most noted Scotch tribes have representatives in my herd. Herd bulls; Scottish Hero (imp.) = 55042 = (90065) 295765 A. H. B.; Gloster King = 68703 = 283804 A. H. B. Young stock for sale. Long-distance phone in house.



### SHORTHORNS

Choice young bulls and heifers, dark roans and reds. One white bull calf at a bargain. Dams all from a milking strain. A few Shropshire ewe lambs. Write for prices.

JOHN RACEY, Lennoxville, Que.

**Bud's Emblem - 63860 - (284905) A. H. B.** First-prize aged bull C. N. E., 1909, by that famous champion and sire of champions, Old Lancaster, imp., = 50068, heads the Old Meldrum herd of SHORTHORNS, near Guelph. A. F. & G. Auld, Eden Mills P. O., Ont.

**Shorthorn Bull Nonpareil Hero**, sired by Nonpareil Count, his dam being a great milker. This 20-months-old bull is choice quality, his dam, of the Flora family, also good milkers. Price, \$125 for quick sale.  
J. K. HUX, Rodney, Ont.

**SHORTHORNS BERKSHIRES** One choice young Lady Fanny bull for sale—good herd header, also several young heifers. A few prizewinning Berkshires, both sexes. Write or come and see them. Prices moderate. ISRAEL GROFF, ELMIRA, ONTARIO.

### 275 BURLINGTON SHORTHORNS 275

3 Choice Imported Scotch Shorthorn Bulls—yearlings.  
1 Imported 2-year-old Bull, red—an extra sire.  
10 Bulls, 9 to 16 months old—all by imported sire.  
30 Choice Young Cows and Heifers—mostly bred or have  
Calves at foot. Long-distance telephone. Farm ¼ mile from  
Burlington Jct. Sta., G. T. R. J. F. Mitchell, Burlington, Ont.

**SCOTCH SHORTHORNS**—Eight extra good young bulls, from 10 to 15 months old; 20 choice cows and heifers, forward in calf or with calves at foot. Prices reasonable. Inspection invited.  
W. G. PETTIT & SONS, Freeman, Ont.  
Farms close to Burlington Jct., G. T. R.

### INVERNESS SHORTHORNS

I can supply Shorthorns of all ages, with richest Scotch breeding and high-class individuality.  
W. H. EASTERBROOK, Freeman, Ont.

**Imp. Scotch Shorthorns**—When looking for Shorthorns, be sure to look me up. Young bulls fit for service, and females all ages; bred in the purple, and right good ones. A. C. Pettit, Freeman, Ont.

**Maple Leaf Shires, Shorthorns, Hampshire Hogs** 1- and 2-yr.-old Shire stallions, females from yearling fillies up; Shorthorns, both bulls and heifers; a choice lot of young Hampshire pigs, both sexes, beautifully belted.  
PORTER BROS., APPLEBY P. O., BURLINGTON STA. Phone.

### Maple Hall Shorthorns

Are bred on most fashionable Scotch lines, and are of high-class individuality. For sale are 6 young bulls from 6 to 10 months of age. A low, thick, sappy lot. Also 10 yearlings and 10 2-year-old heifers. Show material in this lot. Telephone connection.  
DAVID BIRRELL & SON, GREENWOOD P. O., ONT., CLAREMONT STATION.

### IRVINE SIDE SHORTHORNS

One good red bull, 16 months old, by Imp. Pride of Scotland, and out of a Miss Ramsden dam (from imp. sire and dam). Will be priced away down, as he is the last of last year's calves. Will price a few young heifers safe in calf.  
Elora Sta., G. T. R. and C. P. R. J. WATT & SON, Salem P. O.

### VALLEY HOME SHORTHORNS AND BERKSHIRES

If you want a first class Shorthorn bull or heifer come and see what we have, or if you want a show animal with a choice pedigree we have them. For description of herd see Xmas Number of The Farmer's Advocate, on last page. S. J. PEARSON, SON & CO., MEADOWVALE, ONT., P. O. AND STATION, C. P. R.

### CHOICE SCOTCH BULLS

FOR SALE. HERD-HEADING QUALITY.

H. SMITH, R. R. 3, Hay, Huron Co., Ont. Farm adjoins Exeter, on G. T. R.

### SALEM SHORTHORNS

I have generally what you want in choice Shorthorns.

Elora Station, G. T. R. and C. P. R. J. A. WATT, SALEM.

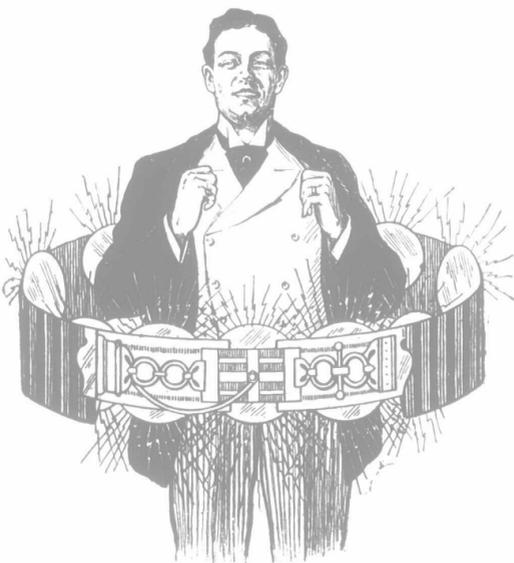
### Three Shorthorn Bulls for Sale.

Show animals, choice breeding. Prices reasonable. Stock bull, Benachie (imp.).  
Geo. D. Fletcher, Binkham P. O., Erin Sta., C. P. R.

### Shorthorns and Leicesters.

For sale. Choice-bred young bulls, and a number of 1 and 2 year-old heifers. All got by Imp. sires, and out of grand milking dams. And Leicester rams and ewes of all ages. W. A. Douglas, Tuscarora, Ont., Caledonia Station.

# FREE UNTIL CURED



Not  
One  
Penny  
in  
Advance  
or on  
Deposit

Forty years ago, when I first discarded drugs and devoted my whole attention to the study of Electricity, I could not afford to do business on to-day's basis, but I have so perfected my Electrical Appliances, and the knowledge I have gained from all these years of experience and research is so great, that I will now give my world-famed Dr. Sanden Electric Belt, with Electric Suspensory, to any man who suffers from Nervous Debility, Varicocele, Lost Vigor, Rheumatism, Lamé Back, Stomach, Liver and Kidney Troubles, absolutely

## FREE UNTIL CURED

I don't ask you to pay or deposit one cent until I convince you. Simply call or write for a Belt and wear it for two months, and if cured pay me the usual price. If not cured, return the Belt, and that ends the matter. Be sure you get the genuine. My great success has brought forth many imitators, and I must caution the public against their worthless, blistering imitations.

Call to-day and take a Belt along, or write for one and my two valuable books on Electricity and its medical uses. Sent, sealed, free by mail.

**DR. A. F. SANDEN,** 140 Yonge St., Toronto, Ont.  
Office Hours—9 to 6; Saturdays Until 9 p. m.

### QUESTIONS AND ANSWERS. Miscellaneous.

#### VARIETY OF CORN FOR SILAGE —STANCHIONS VS. CHAINS.

1. What variety of corn is most suitable to grow for the silo in Kent Co., north part? Would Early Mastodon be a good variety?

2. Are cattle as comfortable fastened with swinging stanchions as with chains?

Ans.—1. Early Mastodon is undoubtedly a great yielder, but rather late in maturing. Would suggest, in preference, Leaming, or, possibly, Reid's Yellow Dent, if your section is very early. Silage corn should be practically ripe when harvested.

2. Even where stanchions are swinging, cattle are held rather more closely than when tied with chains, and, consequently, will be to that extent less comfortable.

#### BUYING A MACHINE.

1. A is a farmer, B a local agent, C a general machine agent. B and C come along to sell A a machine, which he defers buying. Then B tells him if he gives his order for the machine he'll give him a crusher for so much, and if it don't suit when he sees it, the deal is all off. Now, when A goes for crusher, the owner says he won't sell it now, and told B he would not.

1. Can B and C, or the company, force A to take the machine?

2. Is the order as binding as A's note? Ontario. CONSTANT READER.

Ans.—1. It is probable that the company can, or, at all events, that they can compel him to pay the price.

2. We cannot say definitely without seeing the order or a copy of it, but it is altogether likely that the order A appears to have given is fully binding upon him.

#### LINE FENCING.

A and B are to put up a line fence consisting of 96 rods, running east and west. B is to have west half, while A takes east half. B gets his anchor-post in the center, on the line, and puts the posts in old fence corners before the fence was torn down. The old fence has been up for years, and is broken all out of shape. A's anchor-post at the east end is in line with the anchor-post in center, while B's anchor-post at the west end is in twelve feet on A. B claims that it is on the old fence row, on the land that he bought. What steps can A take to have B's fence straightened?

Ontario. PETE.

Ans.—A ought, in the first place, to make sure that B is wrong in respect of the claim he makes; and, accordingly, he should consult a solicitor personally, lay all the facts before him, and take his opinion. If such opinion should be against B's contention, the solicitor should be instructed to write B, requesting him to erect his half of the new fence on the true boundary-line and warning him against incurring litigation by non-compliance with such request.

# Barn Roofing

Fire, Lightning  
Rust and Storm Proof  
Durable and  
Ornamental

Let us know the size of any roof you are thinking of covering and we will make you an interesting offer.

**Metallic Roofing Co.**  
Limited  
MANUFACTURERS  
TORONTO and WINNIPEG

## Shorthorns

**FOR SALE!** Several choice Canadian-bred bulls ready for service; also a good imp. two-year-old bull of the Brawith Bud family. A number of cows and heifers of different ages of right type and quality. Write or call on  
**H. J. DAVIS,**  
Woodstock, Ontario.  
Long-distance Bell 'phone. C.P.R., G.T.R. main lines

## SHORTHORN BULLS

I have some choice young bulls, from imp. sire and dams. Good ones at reasonable rate. Come and see them. Prices right. Also some choice heifers.  
**J. Brydone,**  
MILVERTON, ONTARIO.  
G. T. R. and C. P. R. Station.

## Willow Bank Stock Farm SHORTHORNS AND LEICESTERS.

Herd established 1855; flock, 1848. The great Duthie-bred bull, Imp. Joy of Morning = 32070, and the Missie bull, Royal Star = 72502, heads my herd. Choice selections to offer at all times in both bulls and females.  
**JAMES DOUGLAS, CALEDONIA, ONTARIO.**

## HAWTHORN HERD OF DUAL-PURPOSE Shorthorns

For sale: Young cows and heifers; bred right; priced right; and the right kind. Come and see them.  
**Wm. Grainger & Son, Londesboro, Ont.**

## Shorthorn Cattle

Would price my stock bull, Star Prince = 53900. Red; also one yearling bull, a winner in Toronto and London. Females of all ages. Some very good heifers in nice condition. All reds or good roans.  
**J. T. GIBSON, DENFIELD, ONT.**

**Spring Valley Shorthorns HIGH-CLASS SHORTHORNS**  
Herd headed by Clipper Chief (imp.) = 64220 = (94673). If you want to get an imported bull, or a good Canadian-bred one to head your herd, be sure and write, or come and see them. Long-distance telephone.  
**KYLE BROS., AYR P.O., ONT.**  
I have on hand young bulls and heifers of high-class show type, pure Scotch and Scotch-stopped, sired by that sire of champions, Mildred's Royal. If you want a show bull or heifer, write me.  
**GEO. GIER, Grand Valley P.O. and station, also Waldemar station.**

**30 HEIFERS AND 29 BULLS  
PRESENT OFFERING.**  
Bred right, made right and at prices to make you feel right. Come early and get your choice. List of these, with catalogue, will be mailed to those who ask for them.  
**H. CARGILL & SON, CARGILL, ONT.**

# Facts Worth Knowing About the Frictionless Empire



Here are a few facts about the Frictionless Empire that are worth knowing if you are in the market for a cream separator:

Frictionless Empire has fewer wearing parts than any other cream separator. It is the only cone-method separator with ball bearings at top and bottom of bowi-spindle.

Requires so few drops of oil per day that no oil cups are put on the machine.

Skims to a trace. The six smooth cones are as easy to clean as an equal number of glass tumblers.

The height of the supply can is just right. The grip clutch allows separator

to be started without effort and to reach full speed in a few seconds.

Doesn't spatter oil or milk—the clean separator, with anti-splash one-piece steel supply tank.

The foregoing brief facts are explained fully in our New 25c Book. The most unbiased book on cream separators ever published. Tells the truth about the two standard methods of cream separation. We will send you one copy free, provided you tell us the number of cows you keep. Also name of the publication in which this ad.

appears. Don't miss this interesting book. Ask for book No. 53

All sizes of both cone and disc machines in the Empire Line. Every Empire backed by a guarantee as good as a gold bond. Even if you buy another make of separator now, you'll never be contented until you own a really good separator. Some day you'll own an Empire.

There is an Empire dealer in almost every town in Canada. If there isn't one in your town write us direct for special offer.

## The EMPIRE Line of Cream Separators

**THE EMPIRE CREAM SEPARATOR COMPANY OF CANADA, Limited, Toronto, Ont., SUSSEX - N. B. WINNIPEG, MAN.**

## Troubled With Constipation For Years.

Any irregularity of the bowels is always dangerous to your health and should be corrected at once for if this is not done constipation and all sorts of diseases are liable to attack you.

Milburn's Laxa-Liver Pills cure Constipation and all Stomach, Liver and Bowel complaints.

Mr. Henry Pearce, 49 Standish Ave., Owen Sound, Ont., writes:—"Having been troubled for years with constipation, and trying various so-called remedies which did me no good whatever, I was persuaded to try Milburn's Laxa-Liver Pills. I have found them most beneficial; they are, indeed, a splendid pill, and I can heartily recommend them to all those who suffer from constipation."

Price 25 cents a vial or 5 for \$1.00 at all dealers, or sent direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.

**OUR BOOKS FREE**

### Get our FREE Books and Get More Profit from Your Farm

The Business Farmer doesn't sell out and buy new lands. He makes his old lands new by fertilizing. Get our Free Books which go into the whole subject of Nitrate of Soda fertilizing and show how little it costs to get larger crops and more profits.

### Nitrate of Soda

is an investment that's bound to pay. Thousands have proved it. So can you.  
**HAY** Nitrate of Soda, used 100 lbs. to the acre has increased the yield of barn-cured Hay 1000 lbs.  
**CORN** Nitrate of Soda, used 100 lbs. to the acre, will increase the yield of corn 850 pounds of grain.  
**ALFALFA** Nitrate of Soda is also highly successful in starting Alfalfa right.  
 Special directions and books on the crops you are interested in—free of charge and postpaid.  
 Send a post card for your book or books Today  
**Dr. Wm. S. Myers, Director Nitrate Propaganda**  
 P. John St. and 71 Nassau St., New York

**Trout Run Ayrshires**—My present offering is several heifers and cows in milk, a number of heifer calves, 3 young bulls fit for service, one of them from imp. sire and dam; dam's record 45 lbs. a day. My herd are heavy producers and critically selected. Am also offering 20 Toulouse geese at \$4 and \$5 a pair.  
**WM. THORN** Tyndoch Ont

An Irishman visited a tuberculosis exhibit, where lungs in both healthy and diseased conditions were displayed preserved in glass jars. After carefully studying one marked "Cured tuberculosis lung," he turned to the physician and said:  
 "Perhaps it's because of'm Irish, but if ye cured th' patient, how could ye have his lung in a bottle?"

### Farmers should eat more oatmeal.

Although the farmer of today is able to buy almost anything he wants to wear or to eat he isn't paying enough attention to food values when it comes to his own table.

He feeds his stock carefully, avoids over-feeding and selects the stock food that he believes will give the best return in strength and general efficiency.

If he has been watching the extensive researches and experiments on the question of the best human food for muscle and brain he will heed the advice from all sides to "eat more Quaker Oats."

Quaker Oats is mentioned because it is recognized in this country and Europe as the best of all oatmeals. Feeding farm hands on Quaker Oats means getting more work out of them than if you feed them on anything else.

### QUESTIONS AND ANSWERS. Miscellaneous.

#### MUNICIPALITY AND SHEEP.

Are we responsible for sheep killed by dogs, when we have not at any time taxed dogs in our township? We were going to some years ago, but were petitioned by the ratepayers—by a lawful number. Our lawyer thinks we are, because we had not passed a by-law against paying for sheep.

Ans.—We think so.

#### ASHES ON MEADOW OR GARDEN

I have a lot of wood ashes. Which would be the most profitable, to use on meadow, or on a garden? W. H. D.

Ans.—Use on the garden all the ashes you can apply to advantage, say at the rate of forty bushels per acre. Intensive crops, requiring the application of much labor, should always have first call on manures and fertilizers.

#### POULTRY BOOK.

What poultry book would you recommend for to make them pay: Building, breed, feed, and layers? D. D. S.

Ans.—We do not know any poultry book that will make hens lay, but American Poultry Culture, by R. R. Sando, is a book containing many excellent suggestions. Price, through this office, \$1.25, plus postage, 10 cents.

#### WATERPROOFING CEMENT BLOCKS.

I have the cement blocks made for a house, made since last fall. Would you tell me of a preparation to put on them to make them waterproof, to use on the face of the block? A SUBSCRIBER.

Ans.—There are proprietary preparations for waterproofing cement on the market, some of which are considered satisfactory, while others are scarcely so. In any case, preparations containing linseed oil should not be used, as the vegetable oil combines with the alkali of the cement, forming a sort of soap and disintegrating the surface.

#### ROPE BURN—CEMENT FLOOR FOR HENHOUSE.

1. I have a colt rising three years which got her foot over the rope halter-shank late last fall, and there is still quite a crusty, deep scab all around fetlock. Kindly tell me something that will heal and take away the crusty scab. It seems very sore, and bleeds easily even yet.

2. Do you advise cement floor for henhouse? J.

Ans.—1. This was really a burn, and such wounds are hard to heal, especially where there is movement of the skin when walking. Keep her as quiet as possible, and dress with four ounces raw linseed oil, four ounces lime water, and two drams carbolic acid, three times daily.  
 2. We would not advise a cement floor for a henhouse in preference to wood, unless rats are troublesome, though, if kept plentifully covered with dry litter, it would be all right.

#### AN ACCIDENT.

A and B were driving to town in an old buggy belonging to C. A and B's father. They were leading a horse behind with a halter, without a bit. The horse behind got scared at something and broke one wheel to pieces. B claims that D's dog was the cause of the accident, as he was on the road behind them a couple of rods at the time of accident. He acknowledges that it neither barked at them nor bit the horse. D's man, who was splitting wood at the house door, saw the accident, but did not notice the dog. A and the horse have gone to the West. C orders D to put the buggy in as good repair as it was before.

1. Who would be responsible for expense of fixing buggy?

2. Did D act fair by offering to pay half, if the expense did not exceed \$1.50?

3. Would it make any difference whether D's dog had the muzzle on or off?

4. What is the law concerning the muzzling of dogs outside of the town corporation? SUBSCRIBER.

Ontario.  
 Ans.—1. A and B, we think, ought to bear the expense.

2. Yes; and generously.

3 and 4. We do not see that, under the circumstances stated, the matter of muzzling affects the question.

### FREE TO YOU—MY SISTER

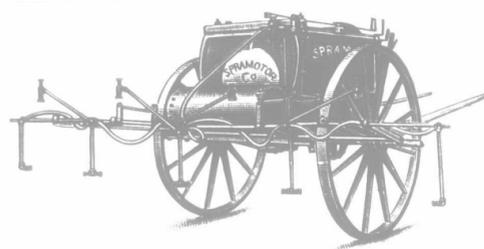


### FREE TO YOU AND EVERY SISTER SUFFERING FROM WOMEN'S AILMENTS.

I am a woman. I know woman's sufferings. I have found the cure. I will mail, free of any charge, my home treatment with full instructions to any sufferer from women's ailments. I want to tell all women about this cure—you, my reader, for yourself, your daughter, your mother, or your sister. I want to tell you how to cure yourself at home without the help of a doctor. Men cannot understand women's sufferings. What we women know from experience, we know better than any doctor. I know that my home treatment is a safe and sure cure for Leucorrhoea or Whitish discharge, Ulceration, Displacement or Falling of the Womb, Profuse, Scanty or Painful Periods, Uterine or Ovarian Tumors or Growths, also pains in the head, back and bowels, bearing down feelings, nervousness, creeping feeling up the spine, melancholy, desire to cry, hot flashes, weariness, kidney and bladder troubles where caused by weakness peculiar to our sex. I want to send you a complete 10 days treatment entirely free to prove to you that you can cure yourself at home, easily, quickly and surely. Remember, that it will cost you nothing to give the treatment a complete trial; and if you should wish to continue, it will cost you only about 12 cents a week, or less than two cents a day. It will not interfere with your work or occupation. Just send me your name and address, tell me how you suffer, if you wish, and I will send you the treatment for your case, entirely free, in plain wrapper, by return mail. I will also send you free of cost, my book—"WOMAN'S OWN MEDICAL ADVISER" with explanatory illustrations showing why women suffer, and how they can easily cure themselves at home. Every woman should have it and learn to think for herself. Then when the doctor says—"You must have an operation," you can decide for yourself. Thousands of women have cured themselves with my home remedy. It cures all, old or young. To Mothers of Daughters, I will explain a simple home remedy, which speedily and effectually cures Leucorrhoea, Green Sickness, and Painful or Irregular Menstruation in Young Ladies. Plumpness and health always result from its use. Wherever you live, I can refer you to ladies of your own locality who know and will gladly tell any sufferer that this Home Treatment really cures all women's diseases and makes women well, strong, plump and robust. Just send me your address, and the free ten days' treatment is yours, also the book. Write to-day, as you may not see this offer again. Address:

**MRS. M. SUMMERS, Box R, 821 WINDSOR, ONT.**

### THE SPRAMOTOR



shown here, will rid an acre of potatoes of blight and bugs in 20 minutes. The only aid required is a horse. What do you think of that? Has non-clogging nozzles, 12-gallon air tank, 125 lbs. pressure guaranteed with 12 nozzles open. Agitator, clean-out and pressure relief into tank, and nozzle protector, controlled from seat. Can be fitted for orchard, vineyard and grain crops. For 1 or 2 horses, or hand operated, if preferred. Write for free booklet. **SPRAMOTOR, LTD., 1359 KING ST., LONDON, ONT.**

## MUSK RATS

Raw Furs

Of all kinds. Write for our Complete Price Lists and SHIP NOW.

Prompt Returns. **E. T. CARTER & CO., 84 Front St. E. TORONTO, ONT.** We Pay Express.

### AYRSHIRES AND YORKSHIRES

Can fill orders for car lots of Ayrshires, or for good grade dairy cows. Young bulls, cows, heifers or calves of choice breeding. Orders taken for imported stock for 1910. A few young Yorkshires. Write us for anything you need in above lines.

**ALEX. HUME & CO., MENIE, ONT.**

### Hillview Ayrshires!

For sale: Females of all ages, bred for dairy purposes, with large teats, deep milkers, and large in size. Also a few extra good young bulls on hand. Winchester station, C. P. R.

**A. Kennedy & Son, Vernon, Ont.**

### CHERRY BANK AYRSHIRES!

Now is the time to order your bull calf, sired by Netherhall Milkman, the first-prize aged bull at Canadian National Exhibition, Toronto, and champion of the breed at Ottawa in 1909. Can fill orders for yearling bulls fit for service, or last fall calves. Females any age. Nothing but the best is our motto. Satisfaction guaranteed. Visitors welcome. **P. D. McARTHUR, North Georgetown, Que** 3/4 mile from Howick station.

### STOCKWOOD AYRSHIRES

Are producers of milk testing high in butter-fat. In my herd I have a range of selection, either imp. or Canadian-bred, of either young bulls or females, unexcelled in Canada. Price and terms to suit purchaser. **D. M. WATT, ST. LOUIS STA., QUE.**

### Stonehouse Ayrshires

36 head to select from. All imported or out of imported sire and dam. For sale: females of all ages. Am now booking orders for bull calves.

**Hector Gordon, Howick, Quebec.**

### Ayrshires—Four young bulls, all bred on dairy lines, out of famous dams; fashionable in color, as well as in breeding. Will be sold worth the money. Females all ages.

**N. DYMENT, Clappison's Corners, Ont.**

### HILLCREST AYRSHIRES.

Bred for production and large teats. Record of Performance work a specialty. Fifty head to select from. Prices right.

**FRANK HARRIS, Mount Elgin, Ont.**

### Springbank Ayrshires!

Canada's leading herd of Record-of-Performance Ayrshires. Big records, big cattle, big udders and big teats. Over 50 head to select from: 13 yearling heifers, 7 yearling calves. All in good condition. **A. S. TURNER, RYCKMAN'S CORNERS, ONT.** 3 Miles South of Hamilton.

### Springhill Ayrshires

Headed by two bulls whose dams have the highest official records in Scotland. Order a bull calf out of our best cows. We can please you in all ages and sexes.

**Robt. Hunter & Sons, Maxville, Ont.**

QUESTIONS AND ANSWERS.  
Miscellaneous.

BEEF RING.

Will you please illustrate in the columns of "The Farmer's Advocate," a plan for a beef ring of 20 shares, in which the cutting can be done so as to have 20 single pieces, ten to each half, five per quarter. The present plan I am using entails too much cutting, and I am informed that there are some companies using a system such as I am asking you to give us in your paper. C. D. S.

Ans.—If any reader knows of such a plan in use, will be kindly send us a clear pen-and-ink diagram, with description.

POULTRY TRESPASSING.

What steps will I have to take to prevent my neighbor's hens from trespassing on my property? If I inform him to keep them off, and he does not do so, is it lawful for me to poison or shoot them? A. J. K.

Ontario.  
Ans.—You may have the chickens impounded under Sec. 3, of the Act Respecting Pounds (Revised Statutes of Ontario, 1897, Chapter 272), or you may serve your neighbor with notice in writing of their trespass, and if thereafter he refuses or neglects to prevent the poultry from further trespassing on your premises, you may have him brought before a Justice of the Peace and fined.

SPRING COMPLAINT IN HENS.

Hens in good condition, but suddenly topple over; legs seemingly the trouble. They gasp for breath, but otherwise seem all right as to feeding, for, in a few days, they get much better, in the meantime retaining their very red combs. Feed wheat, oats and barley, mixed; mash at noon of vegetables and chop, gravel grit included; corn at night. Not matured. R. B.

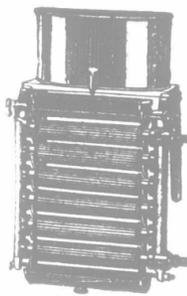
Ans.—I would judge from the description given in the letter, that the birds are affected with what we commonly call spring complaint. Birds thus affected usually get all right as soon as they lay. The cause and cure we are not certain of. The conditions appear to be, birds that are heavily fed during the winter time and lay moderately well, are inclined to go weak in the legs, etc. Occasionally, on the approach of spring, or as soon as the birds can get out of doors on the ground, the trouble disappears. The only treatment we use, is to give them a moderate dose of Epsom salts, and get them outside in the fresh air. W. R. GRAHAM.

OIL CAKE COOKED OR RAW?—RUPTURE—MANGELS ON SAME GROUND.

1. How should oil cake be fed to calves, cooked or raw, and how to pigs?  
2. Gidding, rising two years, has a soft swelling in the scrotum which is sometimes about three inches through, and sometimes is nearly all gone. Is this a rupture? If so, can it be cured? Calf does not seem to have any pain, and is doing well.  
3. Would it be safe to sow mangels on the same land this season on which they were almost entirely destroyed by white grubs last year? Can anything be done to destroy these grubs?

SUBSCRIBER.

Ans.—1. Generally speaking, it is as well uncooked for both calves and pigs.  
2. This is probably a rupture. Do not be in a hurry to treat it, as it may disappear spontaneously. If the lump increases in size, or if it continues until fall, get your veterinarian to examine him, and, if necessary, operate. In such cases, a clam is usually applied.  
3. There would be no special risk in sowing mangels on ground on which they failed last year, though it is doubtful whether the crop would be as good as on fresh land. White grubs can be prevented from infesting land by keeping it pretty constantly under cultivation. The eggs are laid in sod. Once they have obtained entrance, nothing can be done but wait till they disappear. They will likely change into the winged stage this season, and give little trouble.



THE SECRET OF PURE SWEET MILK

You dairy-farmers can't afford to ship impure, germ-laden milk into the towns and cities. Our medical authorities are urging the Government to penalize offending dairymen very severely—don't you run any risks. If you pass all your milk through the Root Cooler-Aerator immediately it leaves the cow, you can guarantee it pure and sweet and get a bigger price for it per gallon. The

ROOT SANITARY MILK COOLER-AERATOR

will keep the milk sweet for 48 hours because it kills the animal heat quickly and cools the milk to the same temperature as cold running water. The water is admitted at the bottom, flows through the bottom tube, then from the water column into the second tube and so on until it reaches the top tube. Thus the cylinders are kept perfectly cold all the time, and as they are deeply corrugated the milk flows down them slowly, reaching the retaining pan thoroughly cooled and aerated. Cylinders are made of heavy copper, heavily coated with pure tin and guaranteed to stand heavy water pressure. Perfectly simple to operate—no complicated parts—a child can easily clean the whole machine in 5 minutes. Made in various sizes—will cool from 40 to 75 gallons an hour. Write us to-day for catalogue and prices—every dairyman should have a Root Cooler—It's a big money maker. Address: W. A. Drummond & Co., 175 King St. E., Toronto

"It's so easy to clean."



CENTRE AND HILLVIEW Holsteins

140 head, 45 females in R. O. M. Herd headed by Brookbank Butter Baron, Bonheur Statesman and Sir Sadie Cornucopia Clothilde. The average of dam, sire's dam and grandam is: milk in 7 days, 62.85 lbs.; butter in 7 days, 30.55 lbs. We have bulls born Mar., '09, to two weeks old for sale, from Record-of-Merit dams. Long-distance telephone. P. D. Fde, Oxford Centre, Ont. Woodstock Sta.

Holstein - Friesians

FAIRVIEW FARM offers young bulls, sired by Pontiac Korndyke and Rag Apple Korndyke, without question the two greatest Korndyke bulls in the world, and out of cows with large A. R. O. records and testing 4% fat. Come and see them, or write. E. H. DOLLAR, Heuvelton, N. Y. Near Prescott.

LAKEVIEW HOLSTEINS!

Herd headed by Count Hengerveld Fayne De Kol, whose sire, Pietertje Hengerveld Count De Kol, is the sire of De Kol Creamelle, the world's champion milk cow, with 119 lbs. milk in 1 day, 780 lbs. in 30 days, 10,017 lbs. in 100 days. He has five daughters that average 30 lbs. in 7 days, and 120 lbs. in 30 days. His dam, Grace Fayne 2nd, 26 30 lbs. in 7 days, is dam of Grace Fayne 2nd's Homestead with the following records:

7 days, 4 years old,	29.16 lbs.	% fat 4.12	Bull
30 "	4 "	119.22 "	% " 4.09 calves
7 "	5 "	30.55 "	% " 4.37 for
7 "	6 "	35.55 "	% " 5.42 sale.

E. F. OSLER BRONTE, ONTARIO.

Elmwood Holsteins—Chicely-bred calves for April and May delivery. Sired by imported Ykema Sir Posch and Pontiac Sarcastic, a grandson of Sarcastic Lad. Registered. Delivered. Express paid. Safe delivery guaranteed. E. D. GEORGE & SONS, PUTNAM, ONT.

EVERGREEN STOCK FARM offers choice young Holstein Bulls, from 10 to 11 months, sired by Sir Mercena Favorite, whose dam and gr. dam averaged 80 lbs. milk per day, and 24.60 lbs. butter per week. Their dams also in A. R. Also choice females for sale. F. E. Pettit, Burgessville, Ont.

Silver Creek Holsteins—Official records range from 13 lbs. for 2-year-olds to 22 lbs. for mature cows. Stock bull, King Fayne Segis Clothilde, his 7 nearest dams' records average 27 lbs. For sale are young stock of both sexes, sired by bull with high official backing and out of Record cows. A. H. TEEPLE, Currie's P. O., Ont., Woodstock, Sta. Phone connection.

Bog Spavin

Cure the lameness and remove the bunch without scarring the horse—have the part looking just as it did before the blemish came.

Fleming's Spavin Cure (Liquid) is a special remedy for soft and semi-solid blemishes—Bog Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can't be limited. Easy to use, only a little required, and your money back if it ever fails.

Fleming's Vest-Pocket Veterinary Adviser

describes and illustrates all kinds of blemishes and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write. FLEMING BROS., Chemists 75 Church St., Toronto, Ontario

MERTON LODGE HOLSTEINS.

I am offering my entire crop of spring calves, sired by a son of De Kol the 2nd Butter Boy the 3rd. I also offer a few young cows and heifers sired by a son of Hengerveld De Kol, the greatest sire of the breed; also a number of high-grade calves sired by our imported Bull, Butter Boy Calamity. W. W. GEORGE, Crampton, Ont.

STILL GREATER!

Grace Fayne 2nd Girl just completed a test of over 30 lbs. butter in 7 days. dam Grace Fayne 2nd is also dam of Grace Fayne 2nd Homestead, world's record, 35.55 lbs., and Grace Fayne 2nd Sir Colantha, who heads the Homewood herd; sire's dam, Colantha 4th Johanna, 35.22 lbs. Young stock for sale. M. L. & M. H. HALEY, Springfield, Ont.

The Maples Holstein Herd

of Record-of-Merit cows, headed by King Posch De Kol. Nothing for sale at present except choice bull calves from Record-of-Merit cows. Also one or two good cows.

WALBURN RIVERS, FOLDEN'S, ONTARIO

High-class Holsteins—Head of herd, Pietje Korndyke Lad. Two nearest dams average 26.09 lbs. butter in 7 days. His sire's dam, Pietje 22nd, has a record of 34.62 lbs. butter in 7 days. Present offering: now booking orders for bull calves sired by above sire and out of A. R. O. dams.

WM. C. STEVENS, PHILLIPSVILLE, ONT.

HOLSTEINS AND YORKSHIRES

R. HONEY, Brickley, Ont. Northumberland Co. Offers a choice lot of boars and sows ready to mate; also orders taken for the coming crop of calves from Prince Posch Calamity Bleske and R.O.P. cows.

DON'T Buy a HOLSTEIN BULL till you get my prices on choice goods from thirteen months down, from best producing strains. "Fairview Stock Farm." FRED ABBOTT, Harrietsville, Ont.

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Dr. McLaughlin's Electric Belt, With Free Electrical Attachment for Weak People, Has Restored His Lost Strength.



This is the way they feel, the men who had given up hope, who thought there was no cure for them until they came upon Dr. McLaughlin's Electric Belt. Now they are full of life, overflowing with joyous spirits, and "care to the winds." Pains are gone; weakness is gone, and full vigor is in every action.  
Do you want to feel like that? Then wear this grand, life-giving appliance for two months at night. It will charge every nerve with electric life, and you will feel like a two-year-old. It puts steam into your run-down body and drives away pain and renews youth.  
Dear Sir,—Regarding your Belt, I can say that I feel brighter and stronger in every way than I ever was before, and I consider myself to-day a better man than I ever expected to be. Thanking you and your Belt for this happy result, I am, yours faithfully, ANTHONY STECKLEY, Bethesda, Ont.  
Dear Sir,—I am glad to say that the Belt I bought from you on the last day of July, 1905, cured me of Sciatica. I wore it about four months, and I have not been troubled since. Yours truly, JAMES ANDERSON, Lot 9, Con. 3, London, Ontario.  
If you haven't confidence in electricity, let me treat you at my risk. I will give you the Belt on trial, without one cent of risk to yourself. Give me reasonable security, and I will take your case, and you can

PAY WHEN CURED

If you have pains in your back, if you feel tired and listless, if you are nervous and weak, if you are growing old too soon, if you have lost vigor and courage of youth, if you have Rheumatism, a weak Stomach, or any evidence of breaking down, you are wasting time. Get Dr. McLaughlin's Belt, with free Electric Attachment.

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You want a fence that is so heavy, stiff and strong that it will discourage any attempt at rooting. After an argument with the IDEAL your hogs will become thoroughly discouraged of trying to get under it. The IDEAL is undoubtedly the fence for you.

The IDEAL is the fence the railroads purchase because of its weight and quality. No. 9 hard steel wire throughout. Heaviest galvanizing on any fence. But the IDEAL lock is the BIG reason why you should buy the IDEAL fence. No lock equal to the IDEAL in gripping-tenacity has yet been discovered. Chances are there never will be. When stretched up, IDEAL is a very handsome fence. Every strand measures exactly true. Every lock is

correctly applied. You see, the IDEAL is manufactured by the most improved fence machinery, in a plant that is considered a model among fence factories. With such superior manufacturing facilities the natural result is a fence overshadowing others in quality—and that is IDEAL fence. For further reasons read our free booklet.

### Agents Wanted to Sell This Superior Fence

IDEAL Agents make the best living, because IDEAL Fence has the weight, strength and quality that make it sell easiest. Let us send you our money-making proposition.

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Stand supreme as a Blood and Nerve Tonic.

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OTTAWA.

## BRAMPTON Jerseys

CANADA'S GREATEST JERSEY HERD

We are offering for sale one 2-year-old bull and four yearlings, fit for service; also six bull calves; females of all ages. Come and see them, or write.

B. H. BULL & SON, BRAMPTON, ONT.

**High Grove Jerseys and Yorkshires.** No better blood in Canada. Present offering: Two young bulls, 12 and 20 months old, respectively; females all ages. Prices and all information on application.

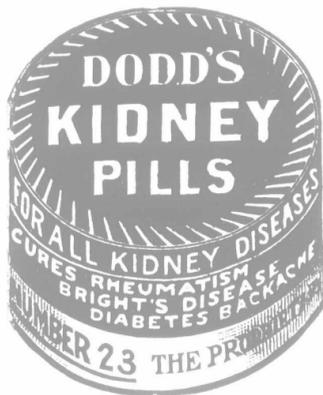
ARTHUR H. TUFTS, P.O. Box 111, Tweed, Ont.

On Lord Dufferin's estate, near Belfast, there once stood an historic ruin, a castle which had been a stronghold of the O'Neils. One day Lord Dufferin visited it with his steward, Dan Mulligan, and drew a line with his stick round it, telling Mulligan that he was to build a protecting wall on that line. And then he went to India, feeling secure as to the preservation of the great historic building.

When he returned to Ireland he hastened to visit the castle. It was gone. He rubbed his eyes and looked again. Yes, gone it certainly was, leaving not a trace behind it. He sent for Dan, and inquired:

"Where's the castle?"

"The castle, my Lord? That old thing? Sure, I pulled it down to build the wall wid'."



### QUESTIONS AND ANSWERS. Miscellaneous.

#### HENS—STRAWBERRIES.

A owns house and lot and keeps 20 hens, which he allows to run at large. B owns land on the other side of road, which he has in strawberries. It is enclosed with a very old picket fence, fallen down in several places. B says that A's hens are damaging his strawberry vines. Can B compel A to keep hens shut in? What is the law regarding this? J. T. S., Ontario.

Ans.—For law on this point, we would refer you to the Act Respecting Pounds (Revised Statutes of Ontario, 1897, chapter 272). B may have the poultry impounded under Sec. 3 of the Act, or may serve A with notice in writing of their trespass, and if thereafter A refuses or neglects to prevent the poultry from trespassing on B's premises, B may have him brought before a Justice of the Peace and fined.

#### HEDGES.

As I am thinking of setting out a hedge, I would like some information as to the most suitable hedge plants, when to plant, and about how long before it should be of use in keeping cattle or horses, or any general information as to its care, etc. The land is gravelly clay, and well drained. The hedge would be on the bank of a ditch. J. T. P., Ontario.

Ans.—There are very few plants in this country suitable for hedges, to be used as fences. Cedars and spruces, while excellent for ornamental hedges, are usually without much value for keeping stock in bounds, unless reinforced with wire. It is, indeed, doubtful whether it is wise to plant any kind of hedge unless it is intended for appearance as much as for utility. The honey locust is practically the one species of tree which in Canada is used for protective-hedge purposes. It seems hardy, grows rapidly, and is plentifully supplied with thorns. Even with it, the hedge is usually reinforced with three strands of smooth, twisted double wire, about three years after being planted, to make it stock proof.

About the first of May is the best time to plant any kind of tree. The first consideration where a hedge has been set, is to get it to grow rapidly. To insure this, the ground on either side should be kept cultivated for two years. Trimming should be done at least yearly, to keep trees stocky and close at the bottom.

Plashing is sometimes resorted to in the case of hedges intended to keep out stock. Where this is to be practiced, hedge trees are not kept quite so low as ordinarily, and—about the third year, usually—side limbs are mostly trimmed off, the roots of the trees slightly loosened, and the little tree trunks are all forcibly leaned in a slanting direction lengthwise of the hedge. They are kept in this position by having wires (previously referred to) fastened to them. Upright shoots, springing from the leaning trunks, tend to make hedge invulnerable.

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Test the truth of this statement by using Potash this year in conjunction with a Phosphatic and Nitrogenous Fertilizer.

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F. G. JAMES, BOWMANVILLE, ONTARIO.

I HAVE GREAT, THICK, ROBUST  
**SHROPSHIRE**  
YEARLING AND TWO-YEAR-OLD RAMS  
dale mares, and a few beautiful Welsh ponies will also be priced at attractive figures.

**Willowdale Berkshires!**  
Nothing to offer but suckers and three extra choice young sows, bred to farrow May and June. Be quick if you want one. J. J. WILSON, Importer and Breeder, Milton P. O. and Station. C. P. R. and G. T. R.

**DUROC - JERSEY SWINE**  
Imported and home-bred. Sows ready to breed Boars fit for service, and younger ones either sex Also Embden geese. MAC CAMPBELL & SONS, HARWICH, ONT.

**Monkland Yorkshires**  
son with any in Canada. We are always in a position to fill large or small orders with despatch. Long-distance phone. JAMES WILSON & SONS, FERGUS, ONT.

**MAPLE LEAF BERKSHIRES**  
For sale: Young sows bred and ready to breed; boars fit for service; also young pigs farrowed in March and April. Imp. sires and dams. Pairs not akin. C.P.R. and G.T.R. Joshua Lawrence, Oxford Centre P. O. Ontario

**SUNNYSIDE CHESTER WHITE HOGS.**  
I am now offering some very choice young things of both sexes, of breeding age. A few Shropshire sheep of both sexes. A number of Bronze turkeys and toms, and Red Cap cockerels and pullets. W. E. WRIGHT, Glanworth P. O., Ont.

**Hillcrest Tamworths** are second to none in America for type and quality. For sale are both sexes and all ages, from sows, bred and heifers fit for service down to youngsters. Herbert German, St George, Ont.

#### FAIRVIEW SHROPSHIRE OFFERING:

Choice rams, shearlings and lambs. Extra good ewes, shearlings and older. They are of the very best breeding. Quality and condition beyond criticism. If you want a few, order immediately. Supply limited, demand unlimited. Circular and prices on application to

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**CALVES** Raise Them Without Milk. Booklet free. The Steel, Briggs Seed Co., Toronto, Ont.

and a lot of grand Shropshire and Cotswold ram lambs, ewes and ewe lambs of high class, both breeds, and all of the best breeding. Will sell them in large lots or singly at prices you can afford to pay. Short-horn bulls and heifers, two good registered Clydesdale mares, and a few beautiful Welsh ponies will also be priced at attractive figures.

**Newcastle Tamworths and Shorthorns**  
FOR SALE: Young sows, due April and May, by imp. boar, dams by Colwell's Choice, Canada's Champion boar in 1911-2-3-5; also choice pigs, both sexes. Two yearling Shorthorn bulls, Syme and Lavender families, and six choice heifers and heifer calves. Prices right. Bel phone. A. A. Colwill, Box 9, Newcastle, Ont.

**Tamworths** A grand lot of young boars from 2 to 4 mos., also young sows (dandies). Some just bred. Some in farrow to first-class boars from best herd in England. Prices reasonable. Chas. Currie, Morrison, Ont.

With very nearly 100 sows in breeding, of modern type and high-class quality, our herd will stand comparison with any in Canada. We are always in a position to fill large or small orders with despatch. Long-distance phone. JAMES WILSON & SONS, FERGUS, ONT.

**MAPLE GROVE YORKSHIRES.**  
To make room for the natural increase in our herd, we now offer for immediate disposal: A FEW CHOICE YOUNG BOARS (big type) ready for use. 10 sows, bred and ready to breed. 75 Sept. pigs, pairs not related. Mostly all sired by M. G. Champion—20102—champion and silver-medal boar at Toronto in 1907, and first as a three-year-old in the aged class in 1908, a grand stock-getter. Many of our sows are prizewinners, and are of the best Yorkshire blood in England and Canada. A fair and square deal to everybody is our motto. We are putting prices low, because we must sell. Satisfaction guaranteed.

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**saves farmers money**  
**lowers taxes—better roads**



THESE culverts of mine are a great thing for the farming world. They not only make good roads possible, but they serve the farmer in many other ways. And they are so simply laid. They come nested like this:



This compactness saves freight and makes it easy to handle them. You put the sections together like this:



Then you clamp the flanges together like this:

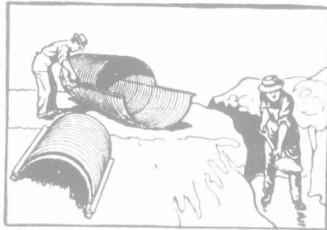


And you've got a piping that will outlast anything of the kind there is. Better get the book and sample and study it.

*G. A. Pedlar*

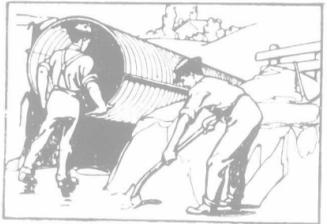
GET your township reeve or warden to study Pedlar Culverts. Send for the Free Book and show him why this Culvert surpasses for all ditch drainage, for restraining small streams, for every use that any culvert can serve. You will profit through lowered taxes, better roads and abolished washouts. Send for the book and interest your township's officials. You will benefit by what they will learn.

For a very moderate cost you can instal a perfect sewage-disposal system on your farm, using a suitably-sized Pedlar Culvert. You can realize the full value of the liquid manure your animals produce by draining your stable-floors with Pedlar Culvert—and that highly valuable manure is usually wasted on farms. Pedlar Culvert makes it easy to water your cattle in winter. And there are a score of other uses for it on the farm.



A few hours' work—no special skill needed—and an indestructible culvert is in place ready for use.

Nothing vies with Pedlar Culvert as a well-curbing or a cistern lining. The thick galvanizing absolutely protects the metal of these Culverts from rust or corrosion, and the metal itself protects the water supply from contamination. For draining swampy spots around the farm, or for irrigation ditches and under-drains Pedlar Culverts far excel tile or cement piping, are much less costly, much easier to instal and infinitely more durable.



## PEDLAR CULVERT

is made in Nestable Sections from the Best Billet Iron, heavily galvanized and deeply corrugated.

It is the simplest kind of work to put these half-sections of Pedlar Culvert together permanently. One half-cylinder is placed on another, and the flange-rib on each side is rigidly compressed flat by the huge pressure exerted by a simple but effective tool. No bolts, no rivets, no makeshifts—but a triple-thick locking rib-flange that gives Pedlar Culvert immense strength. Thus it will stand crushing strains that would destroy any other piping.

This peculiar flat-flange triple-thick rib makes the most perfect joint possible—nearly as good as if it were welded. Yet it allows for expansion and contraction under heat or cold. Thus a Pedlar Culvert will not spring nor split even though frozen solidly full of ice. Also the triple-rib flange principle makes it possible to break joints in putting this Culvert together, something you cannot do with any other culvert or with cement piping or tile.

Pedlar Culverts are the most portable, as well as the most durable, of any piping for any purpose. Being made in half-cylinders, they are nestable—so that a great many linear feet of culvert occupy but few cubic feet of car or wagon space. This economizes freight and carriage costs, and makes it easy to transport this Culvert even in rough country. You should get the free book and sample culvert that makes the whole story clear. State your possible needs when you write for the book, and let us quote prices.

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BOOKLET NO. 20

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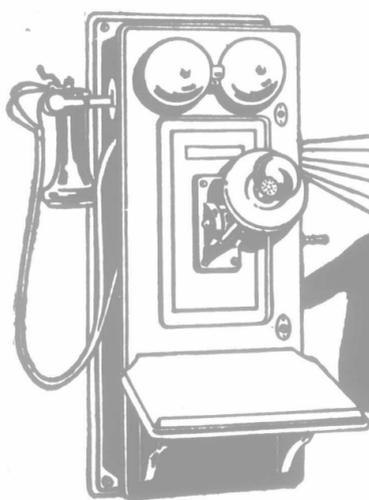
**THE PEDLAR PEOPLE**  
**OF OSHAWA, CANADA**

and Largest Sheet Metal Manufactory in the British Empire

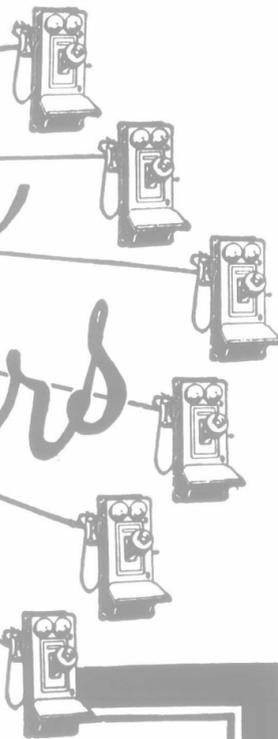
The Pedlar People of Oshawa  
Ontario, Canada

include in the output of their immense factory the below-mentioned specialties in sheet metal building material. Samples, descriptions and prices of any of these will be readily forwarded postpaid and free upon request addressed to the Pedlar warehouse nearest to the inquirer.

Pedlar Nestable Culvert, Oshawa Steel Shingles, Steel Roofing, Corrugated Iron, Metal Shutters, Skylights, Conductor Pipes, Finales, Art Steel Ceilings, Art Steel Siding, Eave Troughs, Prepared Roofing, Metal Doors, Metal Windows, etc.



*You and your neighbors*



## THE SATISFACTION OF SATISFACTORY TELEPHONE SERVICE

**T**HE telephone is in several respects unlike anything else in the civilized world today; it is at once a convenience and a necessity. In fact, so much so is this true that let its service be anything but absolutely perfect and its user feels its loss in a way he could never have believed possible in days before he realized what a telephone meant to him. When you remember that out of 259,000 phones in use in Canada today, all but 9,000 are our make, you will realize the quality we must put into our instruments and begin to understand what

### "Northern Electric" Service Means

**W**HILE "Northern Electric" telephones are as near perfection as brains backed by years of experience can make them, even yet are we trying to still further improve our instruments. Our newly designed No. 1317 Telephone Set—absolutely the most modern farm 'phone in the whole telephone world—represents years of study, an expenditure of \$10,000 in cash, and months of patient experiment and test before we have allowed it to go on the market.

We now pronounce it perfect—now, firmly convinced that it is all we have tried to make it, we offer it to you.

Examine it for yourself—or if you are not sufficiently well posted on such matters, get your own electrical expert to give our No. 1317 the severest tests of which he knows.

Take it up point by point. There is the transmitter, for instance, the same, standard long-distance type that is used on all standard long-distance 'phones. The general manager of the biggest telephone company in the world could have no better on the private 'phone he uses on his own desk. There is no better made. And not only is ours the best transmitter but it is also the cheapest in point of maintenance; it requires less battery cur-

rent than any transmitter on the market—as little as 1-7 of some of the others. Then the receiver on No. 1317 is worthy of attention. Here the magnets demand consideration; made from a special grade of steel, they are permanent—retain their full strength indefinitely. And the bell pieces are made of special annealed Norway iron. This receiver is so constructed that dust cannot accumulate on the back of the diaphragm nor can local noises disturb the listener and spoil transmission. Each part of the receiver on No. 1317 is the result of long and careful study—throughout, it is the best combination possible.

Or look at the switch-hook—note how compact and self-contained it is,—how all contact springs are vertically mounted as to afford no resting place for dust and other accumulations.

Our standard self-contained switch-hook is equipped with platinum points—you can understand the efficiency for which that makes.

And so it goes—through our No. 1317 every part is the best, and most perfect it is possible to devise. Never before has it been possible for any manufacturer, no, not even for us, to offer such an instrument to the Canadian farmer.



**SEND FOR OUR FREE BOOK**

**T**HIS book, Bulletin No. 1216 we call it, (and that's what you ask for), not only tells you all about our instruments, but also tells you all you need to know—every detail—about the steps necessary to take in the organization of a rural telephone company. It describes the simple procedure—goes into it minutely—tells about the very small amount of capital necessary, explains how to interest your neighbors and informs you how your own community can have just as efficient a telephone service as the largest city on the continent. Write for it,—learn why a telephone on your farm will actually save instead of costing you money. Send today.

## THE NORTHERN ELECTRIC AND MANUFACTURING CO. LIMITED

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